NAVAL FACILITIES ENGINEERING COMMAND

GUIDE PERFORMANCE WORK STATEMENT (GPWS)

FOR

MULTI-FUNCTION PUBLIC WORKS SERVICES

PREPARED BY

SOUTHERN DIVISION

NAVAL FACILITIES ENGINEERING COMMAND

INDUSTRIAL ENGINEERING BRANCH

2155 EAGLE DRIVE, P.O. BOX 190010

NORTH CHARLESTON, SOUTH CAROLINA 29419-9010

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USER FEEDBACK/COMMENT SHEET
GUIDE PERFORMANCE WORK STATEMENT FOR
MULTI-FUNCTION PUBLIC WORKS SERVICES

This User Feedback/Comment Sheet has been provided to allow the user of the Guide Performance Work Statement (GPWS) for Multi-Function Public Works Services to provide comments and recommended changes to SOUTHNAVFACENGCOM.

The success of SOUTHNAVFACENGCOM's continuing GPWS revision and improvement efforts will depend heavily upon input provided by users at the activity level and at the NAVFACENGCOM Engineering Field Divisions. Be assured that any comments received will be reviewed in detail and incorporated into the next edition of the GPWS, if appropriate. Such comments should be provided (as a minimum) immediately after initial receipt/use, and again approximately six months into the initial contract term. Comments should be as specific and detailed as possible, and should include:

- Suggested changes in format.
- Comments on the effort required to tailor the GPWS.
- Alternate clauses and approaches to describing the services to be provided.
- Adequacy of the technical specification.
- Alternate procedures and formats for displaying historical data, Schedule of Deductions, Contract Line Items, etc.
- Adequacy of the User's Guide and Quality Assurance Guide.
- Effectiveness and practicality of the suggested quality assurance plans.

COMMENTS
(Attach additional sheets, if required)

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USER: _____ _____
(Activity Name) (Activity Address)

POINT OF CONTACT: _____ _____
(Name/Code) (Telephone Number)

Mail User Feedback/Comment Sheets to:
Commanding Officer
Southern Division, Naval Facilities Engineering Command (Code 164SH)
2155 Eagle Drive, P.O. Box 190010
North Charleston, SC 29419-9010

USER’S GUIDE

GUIDE PERFORMANCE WORK STATEMENT FOR

MULTI-FUNCTION PUBLIC WORKS SERVICES

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USER'S GUIDE
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I. INTRODUCTION

A. Purpose. This NAVFAC Guide Performance Work Statement (GPWS) provides assistance in preparing facilities support contracts to procure services in a number of different public works functional areas. The intent is **not** to provide technical specifications for these different functional areas, but rather to provide a suggested format and general structure of clauses into which specific functional area technical specifications may be inserted, either from other GPWSs or user developed specifications. Contracts for public works services may be a continuing contracting effort or conversion of services from in-house to contract performance under the Commercial Activities (CA) program. This NAVFAC GPWS may be used in either application. This GPWS Package consists of a User's Guide; guide contract sections B, C, and J in the Uniform Contract Format; and a Quality Assurance (QA) Guide.

1. NAVFAC Manual MO-327, *Facility Support Contract Quality Management Manual*, provides extensive information on the preparation of NAVFAC facilities support contracts, from guidance on acquisition planning through the entire PWS and surveillance program development process. This User's Guide is designed to supplement and to be used in conjunction with the NAVFAC MO-327 in developing a PWS for multi-function public works services. The guide provides specific guidance on the use of this GPWS; special items which must be considered if the specification is being written in conjunction with a CA program study; and general guidance on required pre-award actions. Additional guidance on implementing CA program requirements can be found in the Supplement to OMB Circular A-76 and in OPNAVINST 4860.7B.

2. Sections B, C, and J provide suggested formats for displaying contract line (bid) items; technical specifications which establish the framework into which more specific functional area specifications may be inserted; and attachments which provide supplemental information, historical data, etc.

3. The QA guide provides the framework for development of a comprehensive contract surveillance program. The sample QA plans provided should be modified and expanded upon as the GPWS is developed, and additional plans added to cover all of the services included in the contract. Specific guidance and QA plans for the functions included are available in the applicable NAVFAC GPWS.

4. This GPWS does not establish NAVFAC procurement policy. Such guidance may be found in the NAVFAC P-68, *Contracting Manual*.

B. Background. Multi-function contracts are becoming more numerous as increasing numbers of activities decide to combine services for a number of public works related functional areas into single contracts. While GPWSs are readily available to provide technical guidance on developing PWSs for most individual functional areas, there has been little guidance provided as to how to best combine a number of different functional area requirements into a single, comprehensive contract. This GPWS provides such guidance in the form of a suggested format for arranging and packaging multiple technical requirements. Typical public works functions that could be included in a multi-function contract include the following:

FUNCTIONAL AREA	GPWS AVAILABLE	CA * FUNCTIONAL CODE
Installation Bus Services	Yes	S706
Custodial Services	Yes	S709
Pest Management	Yes	S710
Refuse Collection and Disposal	Yes	S712
Motor Vehicle Operation	Yes	S716
Motor Vehicle Maintenance	Yes	S717
Electrical Plants and Systems	Yes	S725
Heating Plants and Systems	Yes	S726
Fire Protection Systems	Yes	N/A
Vertical Transportation Equipment	Yes	N/A
Water Plants and Systems	Yes	S727
Hazardous Waste Management	Yes	N/A
Sewage and Waste Plants and Systems	Yes	S728
Air Conditioning and Refrigeration Plants	Yes	S729
Administrative Telephone Services	Yes	T809
Buildings and Structures - Family Housing	Yes	Z991
Buildings and Structures - Other than Family Housing	Yes	Z992
Grounds and Surfaced Areas	Yes	Z993
Railroad Facilities	Yes	Z997
Waterways and Waterfront Facilities	No	Z998
Other Maintenance, Repair, Alteration, and Minor Construction of Real Property	No	Z999

* From OPNAVINST 4860.7

C. Responsibilities

1. Experience has shown that the best method of developing a facilities support contract is to involve a number of activity personnel, each having a portion of the knowledge and experience required to put the entire package

together. A team of experienced activity personnel should be formed and a team leader appointed. At least one member of the team:

a. Must be familiar with and understand the applicable GPWS(s) and QA Guide(s).

b. Must have a working knowledge of basic contracting procedures.

c. Must have first hand knowledge of the services, and/or equipment/system operations, repairs, and maintenance to be provided by contract.

d. Must be able to identify local needs/requirements that are different from this GPWS and apply specifically to the activity.

2. The following activity personnel are suggested as members of the contract development team. Of course the number of members will depend upon the number of functional areas to be included, the size and complexity of the contract, etc.

a. Team Leader. The team leader has overall responsibility for development of the contract. This includes the development and tracking of procurement milestones; ensuring that each member of the team understands what specific tasks they are responsible for and when each must be completed; and coordinating the efforts of the individual team members so that the many pieces of the procurement package fall neatly into place.

b. Specification Writers. The multi-function specification is most properly prepared by one or more engineers or engineering technicians at the activity who have had at least some experience in writing facilities support contracts. The use of planner and estimators (P&Es) would also appropriate if they are experienced with writing contract specifications, and functional managers may also be used for some services, since they are the familiar with the technical requirements. At least one writer should have attended the Civil Engineer Corps Officers School (CECOS) course "Facilities Support Contracts for Functional Managers". Assistance and guidance may be requested from the geographical EFD. The EFD may offer courses on PWS development, quality assurance, and other related subjects that may be of benefit to the specification writers.

c. Functional Managers. The functional managers, such as division directors for family housing, utilities, transportation, and engineering, are the technical representatives of the team who are most familiar with the functions to be contracted. Early in the specification development process these managers or other functional experts must determine the total scope of the services required, develop detailed inventories of the facilities and equipment to be maintained, collect historical information on work quantities, and identify the specific needs of the activity which may differ from this and other GPWSs being used.

d. Customers. Customer representatives must be included on the team for many services, as they will identify the specific types and levels of services desired.

e. Facilities Support Contract Manager. If there are existing contracts for the services, the Facilities Support Contract Manager (FSCM) or

Quality Assurance Evaluator (QAE) should be able to provide lessons learned and other information pertinent to the new specification. The FSCM/QAE will also be responsible for preparing the required Quality Assurance Plans (see Quality Assurance Guide) and for ensuring that services are specified in such a way as to be inspectable.

f. Contract Specialist. The Contract Specialist provides contractual guidance in the preparation of the specification and the overall solicitation. This person will work with the writer in the preparation of sections B, C, and J, and will prepare the majority of the clauses in sections E, F, G, H, I, K, L, and M of the solicitation. The contract specialist will also ensure that labor laws are properly applied, competition requirements are met, fiscal policies are adhered to, the solicitation is properly advertised, etc.

g. CA Program Manager. If the specification is being prepared under the CA program, the CA Program Manager provides overall guidance on the CA program, and ensures that the specification is developed in conjunction with required most efficient organization and management studies.

3. The completed specification should be reviewed by customer and functional manager representatives, the Engineering Division Director, and the Facilities Management Engineering Director. Consult appropriate EFD instructions to determine if EFD review/approval is required prior to solicitation.

II. GPWS DEVELOPMENT AND USER CONSIDERATIONS. This section of the User's Guide discusses certain assumptions which were made and special items that were considered during the development of the multi-function services GPWS, and provides general information on its use.

A. Development of the GPWS. This GPWS was developed by reviewing a number of multi-function public works services contracts, evaluating their formats, and combining the best format features of each. Particular attention was given as to how to best arrange the technical specifications (Section C) and supporting attachments (Section J) for several different functional areas into a single, comprehensive contract. It seemed the best way to accomplish this was by including those requirements of a general nature that are applicable to all functional areas (e.g. technical definitions, information on Government furnished property and services, management and reporting requirements, general work ordering and scheduling procedures, etc.) into the basic Section C, then including specific functional area requirements in separate annexes to Section C.

B. GPWS User Considerations. The clauses and provisions of this GPWS are arranged in the uniform contract format as required by the Federal Acquisition Regulation (FAR). The sections to which they are assigned shall not be changed.

1. This GPWS contains sections B (Supplies or Services and Prices/Costs), C (Description/Specifications/Work Statement), and J (List of Attachments) only. These sections contain information and clauses peculiar to the technical services required, while Sections D, E, F, G, H, I, K, L, and M contain contract clauses and provisions related to administrative and contractual requirements. Since the latter group will generally be the same in the majority of NAVFAC contracts, their inclusion in each GPWS would be unnecessary duplication. These clauses are included in the Uniform Contract Format Guide (UCFG) published by NAVFAC. The UCFG should be available at each geographical EFD and at NAVFAC

contracting offices, and should be made available to specification writers as required.

2. FAR clauses and provisions may be added or deleted as required by the FAR for specific functions, dollar limitations, bonding, small businesses, etc. They may not be altered unless specifically authorized by the FAR. Most of the clauses in sections I and L, other than those requiring tailoring (i.e. blanks to be completed), may be included by reference. All other FAR clauses and provisions shall be included in full text. Procurement offices shall make available to bidders the full text of all clauses incorporated by reference upon request.

3. Clause titles in the UCFG which include the designation "(NAVFAC)" followed by a date in parenthesis, are NAVFAC clauses which may not be altered without NAVFAC approval. All other non-FAR and non-NAVFAC clauses and provisions in the UCFG (other than those in Sections C and J) should be used substantially as shown or deleted if not applicable to the solicitation. Extensive deliverable performance requirements should not be added to these clauses, but should be included in Section C.

4. Technical Specification

a. Section C, which describes the services to be provided, should be a performance specification to the maximum extent possible. That is, over defining the Contractor's responsibilities in terms of methods or procedures should be avoided in writing the technical specifications since we hope to purchase not only the Contractor's labor, but also his/her expertise in the services to be provided and management of those services. A performance oriented specification should minimize the use of words describing "how to", but should describe work outputs required as explicitly as possible while leaving the Contractor latitude to manage his/her own work force and choose his/her own methods for accomplishing the work.

b. On the other hand, the specification must provide enough information to clearly and precisely define the magnitude (number of services we want to buy) and quality of each of the services to be provided, as well as the scope or limit of each. This is accomplished in this GPWS by specifying, in addition to the desired outputs, schedules of accomplishment and/or specific time limitations in which all services must be completed; listing mandatory operating procedures or steps that the Contractor must follow for some services; and providing historical data on the magnitude of services provided under previous contracts or by in-house forces. Such information will only slightly restrict the Contractor's latitude in managing his/her workforce, but will help ensure all bidders clearly visualize the magnitude of effort which will be required to provide the clearly defined scope of work. Typically this will result in more accurate/realistic Contractor bids, make payment deductions for unsatisfactorily performed or nonperformed work easier to calculate, and reduce the number of contract administration problems.

5. As you use this GPWS you will find in many instances there will be a "NOTE TO THE SPECIFICATION WRITER". These notes provide additional information and/or advise the user to select the appropriate clause, insert additional information, or delete the clause in its entirety. There are also many areas within the text of the GPWS where notes indicate that additional information must be provided; e.g. start times, dates, quantities, etc. These notes will

always be enclosed by the symbol "!". All that is required is to replace the note with the required information.

III. USING THE GPWS. The GPWS for multi-function public works services is not intended to provide detailed technical specifications or to fit the requirements of a specific activity. Rather, it is a suggested format or outline to be used by activities in preparing their specific PWS for multi-function services.

A. Getting Started

1. Scope of Work. The first step in developing a multi-function PWS is to determine one of the following:

a. Are the requirements currently contracted, and will this be a continuation of the contracted services, or a consolidation of several contracts? In either case, the PWS may be written to accomplish any desired scope of work and level of performance.

b. Are the requirements to be included in the PWS subject to a CA cost comparison study under OMB Circular A-76? If this is the case, it is mandatory that the scope of work and level of performance specified be equivalent to the level of effort that can be achieved by the Most Efficient Organization (MEO) if the function is retained in-house. Additional information on developing a PWS for a CA program study is included in paragraph IV of this User's Guide.

2. Review Applicable GPWSs. The next step should be a detailed review of the format and structure of this GPWS, as well as a review of GPWSs or existing technical specifications for each of the functional areas to be included in the multi-function contract. The User's Guide of each GPWS provides details on what services are included, as well as information peculiar to tailoring the GPWS technical specifications for that particular functional area. Users should not assume that any GPWS can be "plugged" into their application with little or no effort. A detailed analysis of the activity's requirements for each functional area will be required.

3. Job Analysis. Chapters 2 and 3 of NAVFAC MO-327 should also be reviewed. These two chapters outline how to perform a job analysis to determine the specific subfunctions to be contracted in each major functional area (including specific work requirements and standards of performance) and how to use the job analysis information and data collected to write the PWS. As the job analysis is being performed for a functional area, the user should compare unique activity requirements with the requirements of the applicable GPWS to determine if any major changes to the GPWS are required. A thorough job analysis for each major functional area will make the writing of the PWS relatively easy since all required data will be readily available and the subfunctions to be contracted will be well defined.

B. Contract Line Items. Section B of the contract (Supplies or Services and Prices/Costs) includes contract line items for each of the services included in the contract. The specification writer and contract specialist will develop these line items in conjunction with the technical specifications, the Schedule of Deductions, the PRS table, and other portions of the contract. The sample contract line items shown in Section B of this GPWS are provided for illustration only. Other GPWSs provide more detailed sample contract line items for their specific technical services. Of course all examples must be tailored to account for the type of contract selected, contract requirements added or

deleted by the user during the job analysis process, the projected start date of contract performance, and other factors including those discussed below.

1. Contract Type. A combination firm fixed-price and indefinite quantity contract is used in this GPWS because it is the most common type of contract for a multi-function services contract. However, other contract types may be used depending on the circumstances. The user should solicit input from the contract specialist or the EFD Contract Department when deciding on the most appropriate contract type. All of the contract requirements in the PWS must be included in either the firm fixed-price or indefinite quantity portions of the contract in Section B.

2. Firm Fixed-Price Contract Requirements. Fixed-price contract requirements are either fixed in scope (time, location, frequency, quantity, etc. are known or can be accurately estimated) or adequate historical data is available to allow a reasonable estimate to be made. Because the scope of work is known, the Contractor agrees to perform a given requirement for a total price. The Contractor performs the work as scheduled and invoices are submitted for the services provided during a given period of time (usually one month).

a. Examples. Examples of typical firm fixed-price contract requirements in this GPWS include service call work and recurring (scheduled) services, such as preventive maintenance inspections, relamping services, scheduled nuisance pest control services, etc. Some of these contract requirements, such as service call work, are normally limited in scope to specified labor and/or dollar amounts. Work beyond these limits will either not be required by the contract, or will be included in the indefinite quantity portion of the contract.

b. Firm Fixed-Price Contract Line Items. The firm fixed-price contract line items may be displayed in one of three different ways in Section B. The user should contact the contract specialist or EFD if in doubt about which procedure should be used.

(1) Section B of the GPWS illustrates the most common procedure, which is to simply require bidders to provide a single monthly price for performance of all the firm fixed-price requirements in the contract. In this case, the contract must also contain a Schedule of Deductions in Section E which the successful bidder will submit, after award, to break down the total bid price for each of the fixed-price requirements in the PWS. See paragraph III.D of the User’s Guide for additional information on the "SCHEDULE OF DEDUCTIONS" clause.

(2) A slightly different procedure would be to include a limited number of fixed-price subline items, each of which could be broken down by a Schedule of Deductions. Separate fixed-price subline items are particularly appropriate to avoid paying the Contractor for work before it is performed, or for not paying enough for work which has already been performed. This can be a problem for services which occur only periodically during the contract term, such as seasonal preventive maintenance services, fertilizing of grounds, etc.

(3) A third procedure would be to eliminate the Schedule of Deductions from the contract and provide a detailed Schedule of Firm Fixed-Price Work. Such a schedule would be formatted similarly to the Schedule of Deductions, and bidders would provide separate unit prices for each of the fixed-price requirements in the PWS.

3. Indefinite Quantity Contract Requirements. Indefinite quantity contract requirements are performed on an "as ordered" basis. A fixed unit price to perform one occurrence or a given quantity of each type of work is bid. Payment for this type of work is based on the unit price bid per unit times the number of units performed. Because each Government order for indefinite quantity work is paid for separately, each and every delivery order must be inspected and accepted as being satisfactorily completed before payment may be made. Two distinct categories of indefinite quantity work are included in this GPWS, unit priced tasks and unit priced labor.

a. Unit Priced Tasks. Bid prices for unit priced tasks include all labor, materials, and equipment for performing a given quantity of work, such as painting of 100 square feet of wall or replacing a square of asphalt shingles. The unit prices bid are multiplied by an estimated quantity of units to be ordered during the contract term, but only for purposes of bid evaluation, since work will only be paid for as ordered and completed.

b. Unit Priced Labor. This type of indefinite quantity work, which is also referred to as "level of effort work", should be used only in connection with maintenance, repair, and alteration of facilities and/or equipment, and then only when such work cannot be identified in advance in sufficient detail to be included in the firm fixed-price or indefinite quantity - unit priced tasks portions of the contract. The labor hour unit prices bid include all costs to perform the work required, except for material and equipment related costs. The Contractor is reimbursed for the direct cost of materials (except for pre-expended bin materials) and equipment, plus a mark-up (fixed burden rate) to allow for material handling costs.

c. Other Factors. As many indefinite quantity work requirements as possible should be included as unit priced tasks vice as level of effort work, since unit priced tasks are easier to understand, easier for Contractors to bid on, the work is easier to order and administer, and material and equipment costs are included in the unit prices bid. Regardless of which of the two types of indefinite quantity work are used, the estimated quantities provided in the solicitation for bid evaluation must be realistic estimates of the anticipated quantities to be ordered during the contract term.

4. Wage Rate Considerations. While service contract wage rates are always included in service contracts over $2500, Davis-Bacon wage rates may or may not be required, depending on the type and scope of services. Davis-Bacon wage rates are applicable if more than $2000 worth of certain services are expected to be performed during the term of the contract. These services include the following:

- Single instances (e.g., service call or indefinite quantity order) of maintenance/repair requiring 32 hours or more to complete are subject to Davis-Bacon wages. This does not apply if the work is clearly for maintenance, as would be the case for preventive maintenance inspections, runway sweeping services, custodial services, grounds maintenance, and others. These services are always subject to the service contract wages, regardless of the size of the job.

- Two-hundred square feet or more of painting per order.

- Construction, alteration, or renovation services are subject to Davis-Bacon wages, regardless of the size of the order.

If Davis-Bacon provisions are included in the contract the user must ensure that the wage rate applicable to each individual contract requirement is clearly delineated. To illustrate this point Section B of this GPWS includes sample contract line items subject to both Service Contract and Davis-Bacon Act wage decisions. Check with the contract specialist if in doubt as to which wage rate applies in specific situations or to specific contract requirements.

5. Separately Priced Options to Extend. The sample contract line items in Section B of this GPWS assume that the initial term (base period) of the contract will be for 12 months. Normally this is the case for multi-function contracts, which normally may begin at any time during the fiscal year and be funded with funds current in the fiscal year of award. However there are cases, such as when adequate funds are not available, when the initial term could be less than 12 months in length. For example, the initial contract term could be for six months, beginning on 1 April and ending on 30 September. If the initial term will be less than 12 months, consider the following.

a. Contract line items 0001, 0002, and 0003 in Section B must specify the number of months in the initial contract term and the appropriate proportionate number of units in the Schedule of Indefinite Quantity Work.

b. Additional contract line items (e.g., 0004, 0005, 0006, etc.) must be added to Section B to account for at least one full 12-month option period. Additional contract line items may be added for subsequent option periods if desired. Check with the contract specialist for specific requirements.

c. Section C, the technical specifications, must clearly indicate the scope of work for the initial period since the work load can vary significantly from month to month. For example, the specification must state whether annual preventive maintenance inspections will be performed during the initial period.

d. The "PERFORMANCE PERIOD OF CONTRACT" clause in Section F and the "BASIS FOR AWARD" clause in Section M must be modified accordingly. Check with the contract specialist for specific wording of these clauses and for other changes that may be required.

e. Schedules of Deductions, one for the initial period and one for each of the separately priced 12-month option periods, must be included in the contract. Of course the items of work and number of units in the Schedules of Deductions must agree with the firm fixed-price contract line items in Section B and the scopes of work defined in Section C. Paragraph III.D of this User's Guide provides information on the development of Schedules of Deductions.

6. Other Clauses. Specific clauses included in Section B differ from NAVFAC EFD to EFD. The user must contact the activity's geographical EFD to identify the specific clauses, if any, which may be required.

C. Technical Specifications. The technical specifications, Section C (Description/Specifications/Work Statement), are the single most important part of a PWS. Within this section, the user must include comprehensive technical requirements, either from the appropriate GPWSs or from existing contracts, that completely and accurately define the services to be provided by the Contractor.

The following paragraphs provide useful information on the organization and contents of the technical specifications of this GPWS.

1. Organization. Section C of this GPWS is organized somewhat differently than the typical PWS.

a. The first or "basic" portion of this section contains information, requirements, and procedures which are applicable to the overall contract. For example, this section contains general technical definitions, information on Government furnished property and services, management and reporting requirements, general work ordering and scheduling procedures, etc. It does not contain specific functional area requirements, such as technical definitions or service requirements peculiar to a functional area.

b. A separate annex to Section C is included for each major functional service area included in the contract. For example, in this GPWS Annex 1 includes buildings and structures maintenance services, Annex 2 includes operation, maintenance, and repair of HVAC Systems, and Annex 3 includes grounds maintenance services. A unique numbering system was developed to designate the annexes and their related attachments. The following is an example of the numbering system used in the GPWS:

Clauses:

C1.1 denotes Annex 1, Clause 1
C1.2 denotes Annex 1, Clause 2
C2.1 denotes Annex 2, Clause 1

!ETC!

Attachments:

J-C1 denotes Attachment 1 to basic Section C
J-C1-1 denotes Attachment 1 relating to Annex 1
J-C1-2 denotes Attachment 2 relating to Annex 1
J-C2-1 denotes Attachment 1 relating to Annex 2

!ETC!

c. Service call, recurring, and indefinite quantity work are the three major categories or types of work in the "basic" Section C into which all of the contract technical requirements are included. Each category includes work ordering procedures, completion times, and other general requirements and procedures. The user must take care to ensure that all of the contract requirements added in the technical annexes fall into one of these three categories.

(1) Service call work includes unscheduled maintenance, repair, alteration, and other miscellaneous requirements which can be completed within specified labor hour and material dollar limitations. Service call work is included in the firm fixed-price portion of the contract.

(2) Recurring work includes all contract requirements which occur on a scheduled, recurring, or predictable basis, including operation of equipment and systems, preventive maintenance inspections, etc. All recurring work is included in the firm fixed-price portion of the contract.

(3) Indefinite quantity work includes unscheduled maintenance, repair, alteration, and other miscellaneous work requirements which are beyond the labor and material limitations of a service call; and all other unscheduled, non-recurring, and infrequently occurring services.

2. Technical Considerations. The following information should be considered by the user during development of the technical specifications.

a. Service Calls. Service call work requirements may be applied to nonrecurring services in many different annexes. Service calls are most often used to accomplish unscheduled maintenance, repair, and alteration requirements, but may also be used for other services, such as unscheduled pest control services, unscheduled custodial services, and many others.

(1) Scope. In the GPWS clause GENERAL REQUIREMENTS AND PROCEDURES FOR SERVICE CALL WORK, service calls are limited in scope to maintenance, repair, alteration, and other miscellaneous work requirements requiring up to a specified number of labor hours and material dollars to complete.

(a) When determining the estimated labor hour and material dollar limits to insert in this clause the user should look carefully at available historical information to ensure that the limits set are reasonable.

1 If historically a large percentage of service call work requires less than four labor hours for completion, it doesn't make sense to set a high upper limit, such as 40 hours. Similarly, if almost all service calls require less than $500 in material costs, do not set the upper limit at $1,000 or more.

2 The labor hour limit may be set at 32 labor hours or higher only if a Davis-Bacon wage determination and related provisions are included in the contract. The GPWS technical specifications provide a choice of clauses depending on whether the limit will be less than or greater than 32 hours.

(b) Of course there are other ways to define the scope of a service call which the user may want to consider, including the following:

1 The service call limit may be expressed simply as a total dollar figure for labor and direct material costs, such as $500. Davis-Bacon wage rates would still apply to any call requiring 32 labor hours or more, as discussed above.

2 The Government may share in the cost of materials above a certain specified limit. For example, the Contractor's liability for direct materials may be limited to $250 per service call, with the Government paying for any material costs over this specified limit. Of course this approach will also require additional administrative effort to track and reimburse the Contractor for the cost of materials over the specified limit.

(2) Service Call Reception. In this GPWS, the Government receives and forwards service call requests to the Contractor during regular working hours. The Contractor receives service call requests directly from customers only after regular working hours, and is required to respond only to emergency and urgent calls after hours. The work reception process described in the GPWS assumes limited use of automated work reception/management equipment.

(a) In-house or Contracted Work Reception. Service call work reception may be performed either by in-house forces or by the Contractor, or there may be a combination of both as described in this GPWS. There are pros and cons to both approaches, as discussed below.

1 Government Work Reception. The primary advantage of a Government operated work reception center is that it allows the Government to retain control over the work being performed by the Contractor.

a A Government work receptionist is in a better position to judge which service calls are for valid maintenance requirements, which are not for valid requirements or are not included in the scope of the contract, and which calls may be for valid requirements, but for which the work needs to be deferred. For example, if a customer calls in to report that three vinyl floor tiles are broken, it may not make sense to issue the Contractor a service call for their replacement if the entire room or building is scheduled for re-tiling within the next few months. The Contractor's work receptionist would probably have no way of knowing about the scheduled re-tiling, or about proposed special repair projects, scheduled equipment replacements, etc. Also, some Contractors may be tempted to respond to every single call received (whether valid or not), or to break up related tasks into separate calls in order to "bust" the service call historical data.

b It has been historically difficult at many activities to get Contractors to properly classify service calls according to definition as emergency, urgent, or routine. It makes more sense for the Government to make these important decisions, at least during regular working hours.

c It has also been historically difficult to get Contractors to keep complete and accurate service call records. Multiple calls from customers for the same problem add to this problem. If the Government retains control, record keeping problems should be kept to a minimum.

2 Contractor Work Reception. The advantage of a Contractor operated work reception center is that it places more complete responsibility for performance on the Contractor, and less on the Government. However, making the Contractor responsible is one thing, enforcing proper performance may not be so easy. A Contractor operated reception center also allows the Contractor to discuss problems directly with the customer, determine the best times to accomplish the work, etc.

3 Other Alternatives. If the volume of after hours calls is very large or very small, or if it is not otherwise desired to have the Contractor receive after hours calls directly from customers, other options should be considered by the user.

a The Government could operate the work reception center 24 hours per day. In this case, the "After Regular Working Hours" paragraph in the GENERAL REQUIREMENTS AND PROCEDURES FOR SERVICE CALL WORK clause could be deleted and other paragraphs modified accordingly.

b The Command Duty Officer, duty SEABEE, or other designated individual could receive calls after regular hours and relay emergency and urgent requirements to the Contractor. In this case, the "After

Regular Working Hours" paragraph in the GENERAL REQUIREMENTS AND PROCEDURES FOR SERVICE CALL WORK clause would have to specify the procedures to be used.

(3) Response and Completion

(a) In specifying service call response and completion requirements for the PWS, the user must consider the location of the activity, the availability of materials, the geographic distribution of the buildings and structures, and similar factors when determining the specific requirements to be included. Keep in mind that stringent response and completion requirements will increase the cost of the contract, and could result in needless contract administration complications and problems. For example, a completion requirement of three days for a routine service call is not unreasonable, but is probably not practical or necessary either.

(b) Since response to service calls after regular working hours, on weekends, and on holidays can be expensive, activities with few service calls may want to consider having civilian or military personnel receive and, if necessary, respond to and complete service calls after regular hours.

(c) This GPWS requires the Contractor to respond to urgent service calls both after hours and on weekends, since by definition, an urgent call is a failure in service which "would soon inconvenience and/or affect the health or well being of personnel". This provision will prevent family housing occupants from having to get along without heat or hot water, for example.

b. Recurring Work. As noted previously, recurring work includes all contract requirements which occur on a scheduled, recurring, or predictable fashion. In a multi-function public works services contract, recurring work can be grouped into three different areas, as follows:

(1) Equipment Operation. Equipment operation includes watchstanding, periodic operational checks, and operator maintenance of HVAC, water, wastewater, heating, and other utility systems. Specific requirements are included in the appropriate technical annex(es) in Section C.

(2) Preventive Maintenance (PM). PM includes inspection, testing, cleaning, and other periodic maintenance requirements that are generally found in most, if not all of the technical annexes.

(a) Experience has shown that it is best for the Government to specify general PM frequencies and work requirements based on NAVFAC maintenance manuals and manufacturer’s recommendations, rather than to have the Contractor develop and submit this type of information for approval after award of the contract. NAVFAC Publication P-717.0, *Preventive/Recurring Maintenance Handbook*, and NAVFAC Manual MO-323, *Inspection, Maintenance and Operations Manual for Reserve Centers*, provide guidance in the preparation of PM requirements.

(b) PM frequencies and work requirements are normally included in Section J of the contract. This information may be included either in one single attachment, regardless of equipment type or related annex, or separate attachments may be included for the PM requirements of each annex. The latter is the approach suggested in this GPWS.

(3) Other Recurring Work. Other recurring work may include such periodic services as relamping, grass cutting, scheduled nuisance pest control, meter reading, and many, many other recurring work requirements.

c. Indefinite Quantity Work. As noted in paragraph III.B.3, two categories of indefinite quantity work items are included in this GPWS, unit priced tasks and unit priced labor.

(1) Unit Priced Tasks. The indefinite quantity unit priced tasks included in the GPWS are provided only to illustrate the types of services for which unit priced tasks may be used, and is by no means a complete list. The user should add or delete items as needed to suit the activity's specific needs. Ensure that the scope of work of any added task is clearly defined in the technical specifications. For example, if the item "roof replacement" is added, the user must specify the type of roofing to be replaced (shingle, built-up, etc.) and the scopes per unit. That is, is roof flashing included in the unit price bid? What happens if deteriorated sheathing is encountered during the replacement? What type/weight of underlayment must the Contractor use? Etc.

(2) Unit Priced Labor. Procedures for establishing the estimated number of labor hours and material costs required for any particular job are described in the GENERAL REQUIREMENTS AND PROCEDURES FOR INDEFINITE QUANTITY WORK clause of Section C. Various estimating guides, such as Engineered Performance Standards (EPS) or standards published by R. S. Means Company, may be used as a basis to determine the estimated number of labor hours required. This GPWS specifies that labor estimates will be based on EPS, since this is the most common estimating system used in facilities support contracts. Should the user chose another estimating standard, appropriate changes must be made to the GPWS technical specifications, historical data, etc.

D. Schedule of Deductions. If used the "SCHEDULE OF DEDUCTIONS" clause in Section E is one of the most important items that the specification writer must consider in developing the multi-function contract since it directly affects the degree of difficulty required to make payment deductions for unsatisfactory performance and nonperformance of work. The schedule is used if a monthly price or limited number of subline items are included in Section B for performance of the firm fixed-price contract requirements. It should not be used if a detailed Schedule of Firm Fixed-Price Work is included in Section B. Refer to paragraph III.B.2 for additional information on fixed-price contract line items.

1. The Schedule of Deductions requires the Contractor to break down the firm fixed-price portion of the bid for each of the fixed-price contract requirements in the PWS. This information is used in conjunction with the "CONSEQUENCES OF CONTRACTOR'S FAILURE TO PERFORM REQUIRED SERVICES" and "ESTIMATING THE PRICE OF NONPERFORMED OR UNSATISFACTORY WORK" clauses (Section E), and the PRS table (Attachment J-E2), in making payment deductions for unsatisfactory performance and nonperformance of firm fixed-price contract requirements. The completed schedule must be provided by the Contractor within 15 calendar days after award of the contract, and the Government retains the right to reject and/or unilaterally establish a schedule if the submitted schedule is materially unbalanced.

2. The items in the sample schedules shown below were taken from the NAVFAC GPWSs for a number of different functional areas, and are provided for illustration only. Of course the user must tailor these examples by adding and deleting contract requirements for each annex as required.

a. In example #1 the services are generally broken down so that, where practical, a unique unit price will be obtained for each service, whereas this is not the case in example #2. Although the format of example #1 is longer and requires more detailed background data to develop, it should be used to the maximum extent possible since the detailed unit prices will make payment deductions more accurate and easier to calculate, and make it easier to ensure that the prices submitted are realistic and balanced. The format shown in example #2 should be considered only if the user does not have adequate data on the quantities of work which will be required. Of course portions of each format may also be combined together, if needed.

b. For both formats, it is important to ensure that the "Number of Units" in the base and options periods reflects the number of services to be performed during those periods. For example, if the initial contract term is to begin on 1 April and run to 30 September the user will need to:

- Change the monthly unit prices in the base period Schedule of Deductions from "12" months to "6" months, and
- Determine the number of services that will be required during that particular six-month period and, if using the format of example #1, modify the number of units accordingly

EXAMPLE #1

SCHEDULE OF DEDUCTIONS FOR BASE PERIOD
(DO NOT SUBMIT SCHEDULE OF DEDUCTIONS WITH BID)

CONTRACT REQUIREMENTS	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
1. Emergency Service Call Work (Clause C.8)	MONTH	12	$_____	$_____
2. Urgent Service Call Work (Clause C.8)	MONTH	12	$_____	$_____
3. Routine Service Call Work (Clause C.8)	MONTH	12	$_____	$_____
4. Annex 1 - Maintenance of Buildings and Structures				
a. Preventive Maintenance (PM) on Systems and Equipment Listed in Attachment J-C1-1 (paragraph C1.3.a)				
(1) Annual PM				
(a) Exhaust Fans (17)	EACH	17	$_____	$_____
(2) Semiannual PM				
(a) Heat Pumps, 5 tons (8)	EACH	16	$_____	$_____

CONTRACT REQUIREMENTS	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
(b) Elec Roll-Up Doors (1)	EACH	2	$_____	$_____
(c) Drinking Fountains (9)	EACH	18	$_____	$_____
(d) Water Heaters, Gas (14)	EACH	28	$_____	$_____
b. Relamping of Buildings Listed in Attachment J-C1-3 (paragraph C1.3.b)	EACH	12	$_____	$_____

!ADD ADDITIONAL ITEMS AS NEEDED!

5. Annex 2 - Operation and Maintenance of HVAC Systems

a. Preventive Maintenance				
(1) PM on Chillers (2) (Clause C2.3)				
(a) Daily	EACH	730	$_____	$_____
(b) Weekly	EACH	104	$_____	$_____
(c) Monthly	EACH	24	$_____	$_____
(d) Semiannually	EACH	4	$_____	$_____
(e) Annually	EACH	2	$_____	$_____
(2) PM on Cooling Towers (1) (Clause C2.3)				
(a) Weekly	EACH	52	$_____	$_____
(b) Monthly	EACH	12	$_____	$_____
(c) Semi-annually	EACH	2	$_____	$_____
(d) Annually	EACH	1	$_____	$_____
b. Equipment Operations (Clause C2.4)	MONTH	12	$_____	$_____
c. Start-Up/Shut-down Services (paragraph C2.5.a)	EACH	24	$_____	$_____
d. Chemical Treatment of Cooling Tower Water (Clause C2.!)	MONTH	12	$_____	$_____
e. Chemical Treatment for Chilled Water Systems (Clause C2.!)	MONTH	12	$_____	$_____

!ADD ADDITIONAL ITEMS AS NEEDED!

6. Annex 3 - Grounds Maintenance Services

a. Maintenance Level I				
(1) Grass Cutting (paragraph C3.7.a)	ACRE	6660	$_____	$_____

CONTRACT REQUIREMENTS	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
(2) Edging (paragraph C3.7.b)	LINEAR FOOT	186000	$_____	$_____
(3) Plant and Shrub Pruning (paragraph C3.7.c)	PLANT	520	$_____	$_____
(4) Cultivation/Mulching (paragraph C3.7.d)	EACH CUL/MUL	564	$_____	$_____
(5) Fertilization (paragraph C3.7.e)	ACRE	50	$_____	$_____
(6) Trash Collection/Disposal (paragraph C3.7.f)	PARCEL	240	$_____	$_____

!ADD ADDITIONAL ANNEXES AS NEEDED!

TOTAL = $_____
(Must equal amount bid for contract line item 0001)

EXAMPLE #2

SCHEDULE OF DEDUCTIONS FOR BASE PERIOD
(DO NOT SUBMIT SCHEDULE OF DEDUCTIONS WITH BID)

CONTRACT REQUIREMENTS	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
1. Emergency Service Call Work (Clause C.8)	MONTH	12	$_____	$_____
2. Urgent Service Call Work (Clause C.8)	MONTH	12	$_____	$_____
3. Routine Service Call Work (Clause C.8)	MONTH	12	$_____	$_____
4. Annex 1 - Maintenance of Buildings and Structures				
a. Preventive Maintenance (PM) on Systems and Equipment Listed in Attachment J-C1-1 (paragraph C1.3.a)	MONTH	12	$_____	$_____

!ADD ADDITIONAL ITEMS AS NEEDED!

5. Annex 2 - Operation and Maintenance of HVAC Systems				
a. PM on Chillers (2) (Clause C2.3)	MONTH	12	$_____	$_____

CONTRACT REQUIREMENTS	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
b. PM on Cooling Towers (1) (Clause C2.3)	MONTH	12	$_____	$_____
c. Equipment Operations (Clause C2.4)	MONTH	12	$_____	$_____
d. Start-Up/Shut-down Services (paragraph C2.5.a)	EACH	24	$_____	$_____
e. Chemical Treatment of Cooling Tower Water (Clause C2.!)	MONTH	12	$_____	$_____
f. Chemical Treatment for Chilled Water Systems (Clause C.2!)	MONTH	12	$_____	$_____

!ADD ADDITIONAL ITEMS AS NEEDED!

6. Annex 3 - Grounds Maintenance Services

a. Maintenance Level I				
(1) Grass Cutting (paragraph C3.7.a)	MONTH	12	$_____	$_____
(2) Edging (paragraph C3.7.b)	MONTH	12	$_____	$_____
(3) Plant and Shrub Pruning (paragraph C3.7.c)	MONTH	12	$_____	$_____
(4) Cultivation/Mulching (paragraph C3.7.d)	MONTH	12	$_____	$_____
(5) Fertilization (paragraph C3.7.e)	EACH	1	$_____	$_____
(6) Trash Collection/Disposal (paragraph C3.7.f)	MONTH	12	$_____	$_____

!ADD ADDITIONAL ANNEXES AS NEEDED!

TOTAL = $_____
(Must equal amount bid for contract line item 0001)

E. Performance Requirements Summary. As the multi-function PWS is being developed, a PRS Table should be prepared. This table will be included in Section J of the PWS and will be used by the Contracting Officer in conjunction with the "CONSEQUENCES OF CONTRACTOR'S FAILURE TO PERFORM REQUIRED SERVICES",

"ESTIMATING THE PRICE OF NONPERFORMED OR UNSATISFACTORY WORK", and "SCHEDULE OF DEDUCTIONS" clauses in making payment deductions for unsatisfactory performance or nonperformance of contract requirements. Additionally, the table is also very useful in the preparation of QA plans (as discussed in the QA Guide to this GPWS) and the Schedule of Deductions, and to provide the FSCM, QAEs, and customers a convenient overview of services to be provided. A sample PRS Table, which illustrates selected contract requirements for a number of typical public works functions, is provided in Attachment J-E2 of the GPWS. Suggested work requirements, maximum allowable defect rates (MADRs), and weights are also shown. The user should tailor and complete this table giving due consideration of the various factors which influence the selection of MADRs and work requirement weights. The NAVFAC MO-327 and the NAVFAC RSED (V3.2) implementation guide provide guidance on the development of PRS tables, and should be referred to by the user.

F. Reviewing the Completed PWS. Conflicting contract requirements inevitably lead to last minute bid inquiries, protests, claims, and difficulties in contract administration. As a result, the Government may pay more for required services; does not obtain the services which were intended; and/or spends a great deal more in contract administration effort than would normally be warranted. To avoid such problems, the user should carefully review the completed PWS to find and eliminate any inconsistencies which may have been created during the writing process.

1. One way to eliminate inconsistencies is through the use of a matrix type check, such as that shown in Table 1 below. Such a matrix can prove to be an effective check on the consistency of the contract requirements. By matching the function with the applicable clause(s), the user can easily review those clauses which apply to a particular function without having to continually scrutinize the entire specification.

2. Another, and probably easier way for activities which have word processing software, is to perform a search on a key word(s). For example, if we wanted to review all contract requirements for "HVAC" or "heating" the software can search the entire document for these key words, and stop every time it encounters them. In this way the specification writer can quickly check for inconsistencies which may have been overlooked during previous reviews.

TABLE 1
EXAMPLE MATRIX CHECK FOR MULTI-FUNCTION PUBLIC WORKS SERVICES CONTRACT

	CONTRACT REQUIREMENTS					
CLAUSE	EMERGENCY SERVICE	URGENT SERVICE	ROUTINE SERVICE	PREVENTIVE MAINTENANCE	OTHER RECURRING	INDEFINITE QUANTITY WORK
Section B						X
C.2	X	X	X	X	X	X
C.8	X	X	X			
C.9				X	X	
C.10						X
J-C6	X	X	X			
J-C7	X	X	X			X
J-C1-2				X		
J-C1-3				X	X	
J-E2	X	X	X	X	X	X

IV. MICELLANEOUS CONSIDERATIONS. This paragraph provides the user with information on the use of negotiated source selection solicitation procedures and award fee contract provisions. Both of these procedures should be discussed with the activity's contract specialist or EFD Contract Department, and carefully considered by the user since they significantly increase the likelihood that the Contractor is going to provide a satisfactory or better level of service.

A. Negotiated Procurements. Negotiated procurements are frequently used as the method of solicitation for multi-function contracts. These procedures typically require interested Contractors (Offerors) to demonstrate, prior to award, that they have the technical capability, experience, and resources to perform the work required; have a logical approach to managing and accomplishing the work; and have proposed enough money to do all of the work and still make a fair profit. Offerors demonstrate their ability to do these things through the submittal of separate written technical and price proposals, which are reviewed and evaluated by the Government.

1. Technical Proposal. Technical proposal requirements may vary depending on the size and complexity of the contract, the types and complexity of information needed from Contractors to demonstrate each firm's technical capability, and other factors. Technical proposal requirements need not be complicated, and could be as simple as a series of "essay" and fill in the blank type questions, each of which must be answered by Offerors. Questions are typically asked in subject areas such as the following:

a. Experience. A question similar to the following may be asked to determine if each proposing firm has satisfactorily performed on other contracts, and has the overall corporate experience required to adequately provide the services required.

OFFEROR'S OVERALL EXPERIENCE. By answering the questions shown below, the Offeror shall illustrate its experience in providing public works services in Government or comparable civilian projects of the same or similar scope, size, and complexity contemplated by this proposed contract. Experience of any proposed subcontractors should also be included. When the Offeror does not have experience in a particular area through its own operations or from a viable subcontractor, be explicit on how that lack of experience is to be overcome. Answer the following questions separately for the Offeror's overall experience in providing multi-function public works services, and for each of the following functional areas:

Annex 1 - Maintenance of Buildings and Structures
Annex 2 - Operation and Maintenance of HVAC Systems
Annex 3 - Grounds Maintenance Services

1. Provide information on Government or comparable civilian projects of the same or similar scope, size, and complexity contemplated by this proposed contract:

Customer (Firm) _____ **Point of Contact** _____
Address _____ **Title** _____
_____ **Telephone** _____
_____

Annual $ Value _____

Remarks/Comments_____

2. List any corporate personnel or company employees who have had experience on the above jobs and plan to be involved on this contract. Who and to what extent?

3. To what extent does their previous experience benefit the requirements of this contract?

!ETC!

b. Corporation and Key Personnel. A question similar to the following may be asked to determine if each proposing firm has adequate resources to provide corporate level management support, to provide the equipment and facilities proposed to provide the required services, and the ability to recruit qualified management, supervisory, and administrative personnel.

QUALIFICATIONS OF CORPORATION AND KEY PERSONNEL. Offerors shall identify the corporate resources available and the education, experience, and qualifications of all key management personnel proposed for supporting the requirements of the proposed contract, including those of proposed subcontractors. Key issues to address shall include the following, as a minimum.

- **Identification and qualifications of all key personnel, to include individuals with significant supervisory, management, or administrative responsibilities. Include information on education, experience, and special licenses, as a minimum.**
- **Corporate commitment to quality.**
- **Corporate personnel resources available to support the proposed contract.**
- **Corporate resources and ability to provide proposed equipment and facilities.**

!ETC!

c. Management and Administration. Offerors may also be asked to describe their proposed organizational structure and procedures for managing the contract. Specific questions may be asked about supply organizations and their ability to obtain materials, the Contractor's proposed phase-in plans, and other management related issues similar to those illustrated in the sample questions below.

MANAGEMENT AND ADMINISTRATION. Offerors shall clearly demonstrate a feasible approach for controlling and managing the overall services to be provided under the proposed contract. Key issues to address shall include the following, as a minimum.

- **Description of the Offeror's general management and administrative organization. Include lines of authority, supervision, and accountability including an organizational chart showing the relationship between overall management (corporate and on-site), administration, quality control, and major functional areas included in the contract. Clearly indicate the organization, staffing, and supervision for each organizational element identified, including overhead and support functions.**

- **Management, control, and distribution of contractor furnished materials and supplies, including organizational charts and/or discussion of:**

- **Potential sources of supply and how these sources will be able to provide materials in a timely fashion.**

- **Policy and procedures for stockage of high turnover and long lead time items, and items required to complete work with rapid completion requirements.**

- **Procedures that will ensure that materials are available for work required after normal working hours.**

- **Management and control of government furnished equipment, materials, and facilities (if any), including proposed procedures, documentation, and control records.**

- **Phase-in/phase-out plans, to include time schedule for al key events, personnel actions, and responsibilities.**

!ETC!

d. Resource Requirements. Questions similar to the following may be asked to determine if proposing firms understand the level of personnel and equipment resources that will be required to provide each of the required services. The number of employees and their skill levels, the number of vehicles and other equipment to be provided, and similar questions are perhaps the most important issues addressed in technical proposals and provide the best insight into the Offerors' understanding of the services to be provided under the contract.

RESOURCE REQUIREMENTS. Offerors shall clearly demonstrate their understanding of the scope of work by illustrating their proposed allocation of resources (including those of proposed subcontractors), both numbers and types, for each of the following services/functional areas:

Service Call Work
Indefinite Quantity Work
Maintenance Of Buildings And Structures (Annex 1)
HVAC Operation, Maintenance, And Repair (Annex 2)
Grounds Maintenance Services (Annex 3)
Transportation Operation And Maintenance (Annex 4)

!ETC!

Provide the following information separately for each listed service/functional area, as a minimum:

- **The number of direct labor, supervisory, and other overhead full time equivalents (FTEs, as defined in !INSERT! clause) allocated to providing the service. Show how these staffing levels were determined and demonstrate how they will be adequate to accomplish services within the specified time frames. Include employee classifications and skill levels for each FTE. Provide rationale for all information provided. Show fractional FTEs if necessary to account for different employee classifications, employees that will be providing services in more than one functional area, and employees that will provide both direct labor and supervisory or overhead functions.**

- **An organization chart showing the relationship between workers, supervision, and quality control effort.**

- **Description of the equipment that will be dedicated to providing the service.**

- **Detailed description of the facilities that will be utilized in providing the service and a discussion of how government furnished facilities (if any) will be utilized.**

!ETC!

e. Methods of Operation. Offerors may be asked to describe the procedures and operational processes they intend to implement in order to perform each of the major service areas in the contract. This will help to ensure that each Offeror fully understands the scope and complexity of the services. Specific questions could be asked for each of the major service areas, similar to the service call example shown below.

METHODS OF OPERATION. Offerors shall describe how their proposed organization will manage and perform the requirements specified for each major service area. Provide detailed answers to the following, as a minimum. If a subcontractor will be the source of staffing and equipment and/or responsible for specific services, describe the interface and coordination between the prime and subcontractor to ensure all work requirements are accomplished. Do not simply refer to or repeat the requirements of the specification.

- **Service Call Work**

  - **Describe the proposed method of managing service work so that calls are properly completed within the specified response and completion times. Describe how calls will be received (both during and after regular working hours), how the work will be scheduled and assigned to an employee(s), how emergency calls will be responded to after regular working hours, and other pertinent information.**

!ETC!

2. Pricing Information. Supplemental pricing information should be obtained with the price proposal in a format which allows for direct comparison with the full time equivalent information provided in the technical proposal.

This simplifies the process of determining that the proposed direct labor cost for each contract requirement is adequate to provide all of the required services. A sample format is shown below which uses the same list of contract requirements found in the Schedule of Deductions (see User's Guide paragraph III.D), and includes a break out of full time equivalents.

SERVICE	NUMBER OF FULL TIME EQUIVALENTS	DIRECT LABOR COST	DIRECT MATERIAL AND EQUIPMENT COST	TOTAL DIRECT COST
EMERGENCY SERVICE CALLS	_____	$_____	$_____	$_____
URGENT SERVICE CALLS	_____	$_____	$_____	$_____
ROUTINE SERVICE CALLS	_____	$_____	$_____	$_____
ANNEX 1 - PM	_____	$_____	$_____	$_____
ANNEX 1 - RELAMPING	_____	$_____	$_____	$_____
		!ETC!		
		TOTAL DIRECT COST		$_____
		MANAGEMENT COST		$_____
		VEHICLE AND EQUIPMENT COST		$_____
		ALL OTHER OVERHEAD AND INDIRECT COST		$_____

3. Again, the user should contact the contract specialist or EFD Contract Department for guidance and approval to use negotiated solicitation procedures. The contract specialist will also need to add additional technical and price proposal submittal requirements, and make other changes to the standard sealed bidding contract format. Functional area managers should also be contacted for guidance on technical proposal requirements, and for possible assistance in the evaluation of technical proposals.

B. Award Fee Provisions. The inclusion of award fee provisions in a multi-function public works services contract allows additional funds to be awarded to the Contractor as an incentive to provide a level of service, responsiveness, and attention to detail which is superior to what would normally be expected. Award fee provisions are included (after EFD approval) by simply inserting NAVFAC clause 5252.216-9315, "AWARD FEE" in the contract, and developing a written Award Fee Determination Plan. These documents specify the maximum award fee amount the Contractor may earn, the process that will be used to periodically evaluate the Contractor's performance and make related award fee determinations, and the performance criteria the Contractor's performance will be measured against.

1. Award Fee Amount. A maximum award fee amount (e.g., $500000) is established by the activity and specified in the "AWARD FEE" clause. This amount must be adequate to motivate the Contractor's performance, but may not be

more than 10% of the total estimated contract price. Award fee evaluations are conducted quarterly, so the Contractor may earn up to 25% of the maximum specified amount each quarter by fully conforming to the performance criteria specified in the contract. Although the fee is awarded quarterly, the entire maximum amount must be funded at the time of contract award. Funds not awarded in one quarter do not carry over to subsequent quarters, and may be returned to activity for other uses.

2. Award Fee Process. For a typical multi-function public works services contract an activity Performance Evaluation Board will meet monthly during the term of the contract to review the Contractor's performance relative to the specified performance criteria (see the following paragraph). Board membership would typically include the Public Works Officer or senior contract specialist, the Facilities Management Engineering Director, the FSCM, major functional area managers, and other individuals involved in the day to day administration of the contract. The Contractor is required to provide the board a short written self evaluation of performance, which is reviewed in conjunction with quality assurance information from the FSCM/QAEs. Once every three months a formal evaluation report is submitted to the "Fee Determination Official", who is normally at the geographical EFD, for approval. This report will recommend an award fee amount based on the Contractor's performance throughout the quarter.

3. Award Fee Performance Criteria. Award fee performance criteria are established by the activity, and may be changed at the Government's sole discretion as long as the Contractor is notified at least 15 days prior to the beginning of the quarterly evaluation period. The ability to change the performance criteria and criteria elements to direct the Contractor's efforts at problems areas or services which are the most important to the Government, can be a powerful tool. Typical award fee criteria for a multi-function public works services contract are included in Table 2 on the following page. Of course this example must be carefully reviewed by the user and tailored to address the particular criteria elements which are most important to the activity.

4. Additional Information. In summary, an award fee contract should be seriously considered as a means of motivating the Contractor to provide a level of service and commitment beyond what would normally be expected. If interested, contact the geographical EFD Contract Department for additional information and detailed requirements for obtaining their approval to include award fee provisions.

V. COMMERCIAL ACTIVITIES (CA) PROGRAM CONSIDERATIONS. This section of the User's Guide discusses some of the special items which must be considered when using this GPWS to prepare a PWS as part of a CA program study. Included are a number of provisions and changes which must be considered by the user.

A. Scope of Work. The user must remember that the scope of work and standards of performance specified in the PWS must be equivalent to the projected capabilities of the MEO. This may require some additional effort on the user's part to ensure that all of the miscellaneous services to be performed by the in-house MEO are included and clearly described in the PWS.

B. Separately Priced Options to Extend. OMB Circular A-76 requires in-house and Contractor bids to be evaluated on at least a three year basis, unless contract funding limitations prevent the initial contract term from being a full 12 months in length. In this situation separately priced options must be

TABLE 2

AWARD FEE PERFORMANCE CRITERIA

CRITERIA ELEMENT	SUB-ELEMENTS	POOR BELOW 80	FAIR 80-84	GOOD 85-89	VERY GOOD 90-94	EXCELLENT 95-100
QUALITY OF WORK (30%)	Workmanship (80%)	Inferior quality of workmanship with excessive number defects	Adequate quality of workmanship with substantial number of deficiencies	Acceptable quality of workmanship with limited number of deficiencies	High quality of workmanship with minor deficiencies	Superior quality of workmanship with no deficiencies
	Effectiveness of Quality Control Program (20%)	Consistently requires Government input to rework unsat jobs	Occasionally requires Government input to rework unsat jobs	Rarely requires Government input to rework unsat jobs	Contractor QC Program identifies all rework requirements	Most jobs do not require rework, QC Programs very effective
TIMELY COMPLETION OF WORK (25%)	Service Call Work (50%)	Frequently misses required completion requirements	Calls occasionally not completed within required completion requirements	Calls almost always completed within required completion requirements	Calls usually completed well before required completion time	Virtually all calls completed well before required completion time
	Indefinite Quantity Work (20%)	Frequently not completed by required date	Work is sometimes not completed by required date	Work almost always completed by required date	Rare that work is not completed by required date	Work always completed by required date
	Other Services (30%)	Work is consistently not completed by required or scheduled date	Work is often not completed by required or scheduled date	Work is occasionally not completed by required or scheduled date	Rarely is work not completed by required or scheduled date	Work is always completed by required or scheduled date
RESPONSE TO SERVICE CALLS (25%)	Emergency Service Calls (65%)	Consistently late in meeting required response time	Often late in meeting required response time	Occasionally late in meeting required response time	Rarely late in meeting required response time	Always responds within required response time
	Urgent Service Calls (35%)	Consistently late in meeting required response times	Often late in meeting required response times	Occasionally late in meeting required response times	Rarely late in meeting required response times	Always responds within required response time
MANAGEMENT (20%)	Cooperation (60%)	Contractor and employees do not demonstrate cooperation in accomplishment of the contract	Contractor and employees occasionally demonstrate cooperation in accomplishment of the contract	Contractor and employees usually demonstrate cooperation in accomplishment of the contract	Cooperation and teamwork exceed normal expectation	Cooperation and teamwork substantially exceed normal expectation
	Reports and Records (25%)	Records and reports consistently late and incomplete	Records and reports often late, inaccurate, or incomplete	Records and reports sometimes late, incomplete, or inaccurate	Records and reports rarely late, incomplete, or inaccurate	Records and reports always timely, complete, and accurate
	Customer Service (15%)	Employees often not courteous and helpful, not well groomed	Employees sometimes not courteous and helpful, not well groomed	Employees are most often courteous, helpful, and well groomed	With rare exceptions, employees are courteous, helpful, and well groomed	Employees very professional in all aspects of customer service

included to cover at least two full fiscal years after the initial term. This means that Section B must contain contract line items for a base period and at least two one-year, separately priced option periods. For example:

1. If the contract term is projected to begin on 1 October, Section B would include contract line items for the base year (12 months) of performance (items 0001, 0002, and 0003) and at least two one-year, separately priced option periods (items 0004, 0005, 0006, and 0007, 0008, and 0009).

2. If the contract term is projected to begin on 1 April, Section B would include contract line items for the initial six month base period of performance through 30 September (items 0001, 0002, and 0003), and at least two one-year, separately priced option periods (items 0004, 0005, 0006, and 0007, 0008, and 0009).

3. In no case may the total contract term exceed 60 months.

C. Continuity of Services. The PWS should address certain issues and requirements relative to the change-over from in-house to contracted performance of services. Therefore, add the following CONTINUITY OF SERVICES clause to Section C. This paragraph tells the Contractor to expect delivery orders for work for which some or all required materials are already on hand. Such jobs will likely be left by the in-house workforce when the conversion to contract is approved.

"CONTINUITY OF SERVICES. At the time of the contract start date the Contractor shall be prepared to accept approximately !INSERT NUMBER! delivery orders for backlogged indefinite quantity work for which materials are already on hand. These proposed delivery orders will be provided to the Contractor and a joint inventory by the Contractor and the Contracting Officer of all materials on hand shall be conducted within !INSERT! calendar days after the contract start date. The Contractor shall assume custody of these materials (which shall be used only for the delivery order for which specifically designated) upon completion of the inventory. The Government will provide the Contractor a detailed scope of work developed according to the procedures specified in the GENERAL REQUIREMENTS AND PROCEDURES FOR INDEFINITE QUANTITY WORK clause, Section C, for each proposed delivery order which involves unit priced labor. The Contractor shall review the Government's scope of work and provide proposed unit prices for the specified equipment and for those specified materials which are not already available in the completed inventory; indicate specific areas of disagreement with the proposed scope of work; and submit proposed scope changes in accordance with the aforementioned clause. Reviewed work scopes shall be returned to the Contracting Officer within !INSERT! calendar days after receipt for backlogged urgent delivery orders, and within !INSERT! calendar days after receipt of backlogged routine delivery orders. Completion dates for each backlogged delivery order shall be negotiated."

VI. PRE-AWARD CONSIDERATIONS. Prior to award it is essential that the activity consider the following aspects of the operation and administration of a multi-function public works services contract. Additionally, Chapters 5 and 6 of NAVFAC MO-327 discuss a number of items which must be considered, including a pre-award survey of the apparent low, responsive bidder, and a review of the submitted quality control program.

A. Quality Assurance Evaluator Training. It is vitally important to have an adequate number of qualified QAEs on board prior to the contract start date. In fact, NAVFAC EFD contract offices will not allow contracts to be advertised until the activity provides assurance that such resources will be provided. NAVFAC P-68, *Contracting Manual*, details NAVFAC policy for minimum training requirements for personnel involved in NAVFAC contracts. The manual requires all individuals assigned to QAE duties to attend the QAE training course provided by each of EFDs within six months of their assignment, or have equivalent training as determined by the Contracting Officer. If this training has not been received, the activity should take steps to have the QAEs attend the next available course and in the meantime should develop a local training program. The EFD (Code 16) should be contacted for QAE training scheduling or assistance. Of course QAEs must also be technically qualified to inspect their particular functional area(s), and should attend appropriate technical training if required.

B. Site Visits. QAEs or other Government representatives should be prepared to conduct site visits with potential bidders after inviting bids, when directed by the Contracting Officer or Contract Specialist. The purpose of these visits is to familiarize Contractors with the location of contract requirements, not to provide additional information which should have been included in the PWS. QAEs must be briefed by the Contracting Officer or the Contract Specialist as to what can and cannot be said to potential bidders during site visits. Customers must also be briefed on precautions to be taken so as not to reveal sensitive information to potential bidders during these visits.

C. Government Furnished Property. Are Government furnished facilities, equipment, and materials, if any, ready for turnover? Has a property administrator been assigned as required by NAVFAC P-68, paragraph 45.303?

D. Building Managers. Are building managers designated to act as focal points for customer complaints? If so have they been properly trained? Are they familiar with the specification? Has a method been developed for building managers and other customers to submit complaints to the QAEs, Contracting Officer, or other designated representatives?

E. Quality Assurance Plans. Are adequate QA Plans prepared and ready for use?

END OF USER'S GUIDE

GUIDE PERFORMANCE WORK STATEMENT

FOR

MULTI-FUNCTION PUBLIC WORKS SERVICES

PART I - THE SCHEDULE

SECTION B: SUPPLIES OR SERVICES AND PRICES/COSTS

!**********

NOTE TO SPECIFICATION WRITER: User's Guide paragraph III.B discusses a number of issues relative to Section B which the user may want to review prior to tailoring this section. Some NAVFAC Engineering Field Divisions (EFDs) require additional clauses to be added to Section B. The user must contact the geographical EFD to identify additional clauses, if any, which may be required.

The numbering system for contract line items and subline items shall follow the method prescribed in Subpart 204.71 of the DOD FAR Supplement. In the following example, contract line item 0001 is prepared as a single line item supported by a Schedule of Deductions. Alternate methods would be to include a limited number of subline items, each of which would be broken down by Schedules of Deductions; or to eliminate the Schedules of Deductions from the contract and prepare a detailed Schedule of Firm Fixed-Price Work, with detailed contract line items similar to those in the Schedule of Deductions. See paragraph III.B.2 of the User's Guide.

Only the base and first option periods are included in the example contract line items shown below. The user may want to include other separately priced option periods, as discussed in paragraph III.B.5 of the User's Guide.

**********!

Item	Supplies/Services	Quantity	Unit	Unit Price	Amount
0001	FIRM FIXED-PRICE WORK: Price for the BASE PERIOD for all work specified in the contract except for work specifically identified as being included in the indefinite quantity portions of the contract.	12	MONTH	$_____	$_____
0002	INDEFINITE QUANTITY WORK - UNIT PRICED TASKS: Price for the BASE PERIOD to perform the unit priced tasks listed in the Schedule of Indefinite Quantity Work below. The quantities listed are realistic estimates provided solely for the purpose of bid evaluation and for establishing penal sums of bonds (if required). The price for this bid item is the total of the subline items listed in the Schedule of Indefinite Quantity Work - Unit Priced Tasks.				

Item	Supplies/Services	Estimated Quantity	* Unit	Unit Price	Amount

!**********

NOTE TO SPECIFICATION WRITER: The indefinite quantity contract line items and quantities listed below are provided for illustration only. Add and delete items as required as the technical specifications are developed. Ensure the appropriate wage rate is identified for each item. See paragraph III.B.4 of the User's Guide for additional information.

**********!

SCHEDULE OF INDEFINITE QUANTITY WORK - UNIT PRICED TASKS

(Subject to Service Contract Act Wages)

A.	Annex 1 - Buildings and Structures				
0002AA	Remove and replace asphalt floor tile, 9" x 9", 1/8" thick (paragraph C1.!)	5400	SF	$_____	$_____
0002AB	Remove and replace acoustical ceiling tile, 2' x 4' and 2' x 2', 5/8" thick (paragraph C1.!)	8000	SF	$_____	$_____
B.	Annex 2 - HVAC Systems				
0002AC	Remove and replace window A/C unit, 12000 Btu (paragraph C2.!)	20	EACH	$_____	$_____
C.	Annex 3 - Grounds Maintenance				
0002AD	Unscheduled grass cutting, maintenance level I (paragraph C3.!)	450	ACRE	$_____	$_____
0002AE	Tree removal, 6"-12" DBH (paragraph C3.!)	12	EACH	$_____	$_____
D.	Annex 4 - Transportation Operation and Maintenance				
0002AF	Unscheduled road sweeping (paragraph C4.!)	35	CURB MILE	$_____	$_____
0002AG	Snow removal, class A, 25000 square yards per removal (paragraph C4.!)	8	EACH	$_____	$_____
0002AH	Unscheduled bus service, ≤ 25 miles round trip (paragraph C4.!)	65	TRIP	$_____	$_____

Item	Supplies/Services	Estimated Quantity	* Unit	Unit Price	Amount
	(Subject to Davis-Bacon Act Wages)				
A.	Annex 1 - Buildings and Structures				
0002BA	Remove and replace asphalt floor tile, 9" x 9", 1/8" thick (paragraph C1.!)	10000	SF	$_____	$_____
0002BB	Interior painting, gypsum wallboard, one coat (paragraph C1.!)	25000	SF	$_____	$_____
0002!!	!ADD ADDITIONAL UNIT PRICED TASKS AS NEEDED!	!INSERT!	!!	$_____	$_____
	TOTAL PRICE FOR CONTRACT LINE ITEM 0002 (0002AA - 0002!!)				$_____
0003	INDEFINITE QUANTITY WORK - UNIT PRICED LABOR: Price for labor, material, and equipment in the BASE PERIOD to perform maintenance, repair, and alteration work requirements that cannot be identified in sufficient detail to be included in Contract Line Items 0001 and 0002. This work is described in the GENERAL REQUIREMENTS AND PROCEDURES FOR INDEFINITE QUANTITY WORK clause of Section C. The quantities shown are realistic estimates provided solely for bid evaluation and for establishing penal sums of bonds (if required). The price for this bid item is the total of the subline items listed in the Schedule of Indefinite Quantity Work - Unit Priced Labor.				
	SCHEDULE OF INDEFINITE QUANTITY WORK - UNIT PRICED LABOR				
	(Subject to Service Contract Act Wages)				
0003AA	Composite Skilled Trade**	500	HR	$_____	$_____
0003AB	Unskilled Laborer	100	HR	$_____	$_____
0003AC	Equipment Operator	50	HR	$_____	$_____
0003A!	!ADD ADDITIONAL TRADES, AS NEEDED!	!INSERT!	HR	$_____	$_____

Item	Supplies/Services	Estimated Quantity	* Unit	Unit Price	Amount
	(Subject to Davis-Bacon Act Wages)				
0003BA	Composite Skilled Trade**	2000	HR	$_____	$_____
0003BB	Unskilled Laborer	400	HR	$_____	$_____
0003BC	Painter	600	HR	$_____	$_____
0003BD	Equipment Operator	200	HR	$_____	$_____
0003B!	!ADD ADDITIONAL TRADES, AS NEEDED!	!INSERT!	HR	$_____	$_____
0003CA	MATERIAL TO SUPPORT UNIT PRICED LABOR: Price for materials in the BASE PERIOD to support the unit priced labor portion of the contract. The price will be calculated by multiplying the bidder's fixed burden rate (FBR) times the Government's estimated cost for materials shown below, and adding the result to the estimated amount.				
				$75000 + ($75000 x ____%) (FBR) =	$_____
0003DA	EQUIPMENT TO SUPPORT UNIT PRICED LABOR: Government's estimated cost for equipment in the BASE PERIOD to support the unit priced labor portion of the contract.				
				Estimated cost for equipment =	$ 10000
	TOTAL PRICE FOR CONTRACT LINE ITEM 0003 (0003AA - 0003DA)				$_____
	TOTAL PRICE FOR BASE PERIOD (0001 - 0003)				$_____
0004	FIRM FIXED-PRICE WORK: Price for the FIRST OPTION PERIOD for all work specified in the contract except for work specifically identified as being included in the indefinite quantity portions of the contract.	12	MONTH	$_____	$_____

Item	Supplies/Services	Estimated Quantity	* Unit	Unit Price	Amount
0005	INDEFINITE QUANTITY WORK - UNIT PRICED TASKS: Price for the FIRST OPTION PERIOD to perform the unit priced tasks listed in the Schedule of Indefinite Quantity Work below. The quantities listed are realistic estimates provided solely for the purpose of bid evaluation and for establishing penal sums of bonds (if required). The price for this bid item is the total of the subline items listed in the Schedule of Indefinite Quantity Work - Unit Priced Tasks.				

SCHEDULE OF INDEFINITE QUANTITY WORK - UNIT PRICED TASKS

(Subject to Service Contract Act Wages)

A.	Annex 1 - Buildings and Structures				
0005AA	Remove and replace asphalt floor tile, 9" x 9", 1/8" thick (paragraph C1.!)	5400	SF	$_____	$_____
0005AB	Remove and replace acoustical ceiling tile, 2′ x 4′ and 2′ x 2′, 5/8" thick (paragraph C1.!)	8000	SF	$_____	$_____
B.	Annex 2 - HVAC Systems				
0005AC	Remove and replace window A/C unit, 12000 Btu (paragraph C2.!)	20	EACH	$_____	$_____
C.	Annex 3 - Grounds Maintenance				
0005AD	Unscheduled grass cutting, maintenance level I (paragraph C3.!)	450	ACRE	$_____	$_____
0005AE	Tree removal, 6"-12" DBH (paragraph C3.!)	12	EACH	$_____	$_____
D.	Annex 4 - Transportation Operation and Maintenance				
0005AF	Unscheduled road sweeping (paragraph C4.!)	35	CURB MILE	$_____	$_____

Item	Supplies/Services	Estimated Quantity	* Unit	Unit Price	Amount
0005AG	Snow removal, class A, 25000 square yards per removal (paragraph C4.!)	8	EACH	$_____	$_____
0005AH	Unscheduled bus service, ≤ 25 miles round trip (paragraph C4.!)	65	TRIP	$_____	$_____

(Subject to Davis-Bacon Act Wages)

A. Annex 1 - Buildings and Structures

0005BA	Remove and replace asphalt floor tile, 9" x 9", 1/8" thick (paragraph C1.!)	10000	SF	$_____	$_____
0005BB	Interior painting, gypsum wallboard, one coat (paragraph C1.!)	25000	SF	$_____	$_____
0005!!	!ADD ADDITIONAL UNIT PRICED TASKS AS NEEDED!	!INSERT!	!!	$_____	$_____

TOTAL PRICE FOR CONTRACT LINE ITEM 0005 (0005AA - 0005!!) $_____

0006 INDEFINITE QUANTITY WORK - UNIT PRICED LABOR: Price for labor, material, and equipment in the FIRST OPTION PERIOD to perform maintenance, repair, and alteration work requirements that cannot be identified in sufficient detail to be included in Contract Line Items 0004 and 0005. This work is described in the GENERAL REQUIREMENTS AND PROCEDURES FOR INDEFINITE QUANTITY WORK clause of Section C. The quantities shown are realistic estimates provided solely for bid evaluation and for establishing penal sums of bonds (if required). The price for this bid item is the total of the subline items listed in the Schedule of Indefinite Quantity Work - Unit Priced Labor.

SCHEDULE OF INDEFINITE QUANTITY WORK - UNIT PRICED LABOR

(Subject to Service Contract Act Wages)

		Estimated	*	Unit	
0006AA	Composite Skilled Trade**	500	HR	$_____	$_____

Item	Supplies/Services	Quantity	Unit	Price	Amount
0006AB	Unskilled Laborer	100	HR	$_____	$_____
0006AC	Equipment Operator	50	HR	$_____	$_____
0006A!	!ADD ADDITIONAL TRADES, AS NEEDED!	!INSERT!	HR	$_____	$_____
	(Subject to Davis-Bacon Act Wages)				
0006BA	Composite Skilled Trade**	2000	HR	$_____	$_____
0006BB	Unskilled Laborer	400	HR	$_____	$_____
0006BC	Painter	600	HR	$_____	$_____
0006BD	Equipment Operator	200	HR	$_____	$_____
0006B!	!ADD ADDITIONAL TRADES, AS NEEDED!	!INSERT!	HR	$_____	$_____
0006CA	MATERIAL TO SUPPORT UNIT PRICED LABOR: Price for materials in the FIRST OPTION PERIOD to support the unit priced labor portion of the contract. The price will be calculated by multiplying the bidder's fixed burden rate (FBR) times the Government's estimated cost for materials shown below, and adding the result to the estimated amount.				
				$80000 + ($80000 x ____%) (FBR) =	$_____
0006DA	EQUIPMENT TO SUPPORT UNIT PRICED LABOR: Government's estimated cost for equipment in the FIRST OPTION PERIOD to support the unit priced labor portion of the contract.				
				Estimated cost for equipment =	$ 11000
	TOTAL PRICE FOR CONTRACT LINE ITEM 0006 (0006AA - 0006DA)				$_____
	TOTAL PRICE FOR FIRST OPTION PERIOD (0004 - 0006)				$_____
	TOTAL PRICE FOR BASE AND FIRST OPTION PERIODS (0001 - 0006)				$_____

* DBH - Diameter at Breast Height
FBR - Fixed Burden Rate (see DEFINITIONS - TECHNICAL clause, Section C)
HR - Labor Hour (see DEFINITIONS - TECHNICAL clause, Section C)
SF - Square Foot

** Composite Skilled Trade - Includes carpenter, electrician, plumber, and all other skilled trades except painter and equipment operator.

END OF SECTION B

PART I - THE SCHEDULE

SECTION C: DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

TABLE OF CONTENTS

!ETC!

PART I - THE SCHEDULE

SECTION C: DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

C.1 GENERAL INTENTION. The intention of this solicitation is to obtain operation, maintenance, repair, alteration, and other miscellaneous public works services at !INSERT NAME OF ACTIVITY! by means of a combination firm fixed-price and indefinite quantity contract.

!**********
NOTE TO SPECIFICATION WRITER: If some public works functions are already being performed by contract or by in-house forces, the user may want to clarify the scope of work by adding a "Work Excluded" paragraph to the following clause. Be careful to avoid giving bidders the impression that if work is not specifically excluded, it is automatically included.
**********!

C.2 GENERAL REQUIREMENTS. The Contractor shall furnish all labor, supervision, tools, materials, equipment, incidental engineering, transportation, and management necessary for the operation, maintenance, repair, and alteration of public works facilities and related systems and equipment; and for the provision of other miscellaneous services in accordance with the contract requirements. The work includes the performance of service call work, recurring work, and indefinite quantity work, and specifically includes the following functions:

a. Annex 1 - Maintenance of Buildings and Structures (Other than Family Housing)

b. Annex 2 - HVAC Operation, Maintenance, and Repair

c. Annex 3 - Grounds Maintenance Services

d. Annex 4 - Transportation Operation and Maintenance

e. Annex 5 - Maintenance of Electrical Distribution System

f. Annex 6 - Operation and Maintenance of Heating Plants and Systems

g. Annex 7 - Operation and Maintenance of Water Plants and Systems

h. Annex 8 - Operation and Maintenance of Wastewater Collection Systems and Treatment Facilities

!ETC!

!**********
NOTE TO SPECIFICATION WRITER: Unique functional terms should be added to the "DEFINITIONS - TECHNICAL" clause in each technical annex. The following technical definitions apply to the entire PWS, and are not unique to an individual annex. Add or delete definitions as required.
**********!

C.3 DEFINITIONS - TECHNICAL. As used throughout this contract, the following terms shall have the meanings set forth below. Additional definitions are in the "DEFINITIONS" clause in Section I, and in the "DEFINITIONS - TECHNICAL" clause of each annex to Section C.

a. Where "as shown", "as indicated", "as detailed", or words of similar import are used, reference is made to this specification and the drawings accompanying this specification unless stated otherwise.

b. Where "as directed", "as required", "as permitted", "approval", "acceptance", or words of similar import are used, reference is made to the direction, requirement, permission, approval, or acceptance of the Contracting Officer is intended unless stated otherwise.

c. Alteration/Construction. The installation or erection of something not previously existing, i.e., new work. Applies to both the firm fixed-price and indefinite quantity portions of the contract.

d. Contracting Officer. The Contracting Officer is a person with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings. The term includes certain authorized representatives of the Contracting Officer acting within the limits of their authority as delegated by the Contracting Officer.

e. Contractor. The term Contractor refers to both the prime Contractor and any subcontractors. The prime Contractor shall ensure that his/her subcontractors comply with the provisions of this contract.

f. Contractor Representative. A foreman or superintendent assigned in accordance with the "CONTRACTOR EMPLOYEES" clause, Section C.

g. Direct Material Costs. The actual vendor invoice charges for materials used for performance of work under this contract. Direct material costs shall include transportation charges when such charges are included on the invoice by the vendor, as well as any discounts allowed for prompt payment and discounts or rebates for core value or salvage value that accrue to the Contractor. When questions arise concerning the cost of materials, material costs will be based on the lowest of quotes provided by the Contractor from at least three different commercial vendors for the direct material cost. The Government retains the right to obtain additional quotes in questionable situations. The lowest price will be used.

h. Engineered Performance Standards (EPS). A job estimating system developed for the Department of Defense. EPS is the average time necessary for a qualified craftsman working at a normal pace, following acceptable trade methods, receiving capable supervision, and experiencing normal delays to perform defined amounts of work of a specified quality. EPS manuals are published under the following numbers by each military branch. See Attachment J-E1 for additional information.

Navy:	NAVFAC P 700 Series
Army:	TB 420 Series
Air Force:	AFM 85 Series

!**********
NOTE TO SPECIFICATION WRITER: Include the following definitions **ONLY** if unit priced labor is included in the contract.
**********!

The following definitions are applicable to the application of Engineered Performance Standards.

(1) Additional Material Handling. Time expended for loading materials from storage to truck, unloading materials to work area, moving materials to work area, moving materials from storage to job site, removing debris, and handling of materials during the job that is not included in the craft time standard. The above definition is a summary of the definition of "Additional Material Handling" as used in development of Engineered Performance Standards.

(2) Craft Phase. The numbered chronological sequence in which a specific craft performs a job phase. For example:

JOB PHASE	CRAFT PHASE	CRAFT	DESCRIPTION
1	1	Carpenter	Fabricate and install frame for new wall
2	1	Electrician	Rough in electrical
3	2	Carpenter	Install sheet rock
4	2	Electrician	Trim out electrical
5	1	Painter	Paint new wall

(3) Delay Allowances. Time expended for planning work in the shop and at the job site; personal needs; balancing delays waiting for other craftsmen; unavoidable delays; partial day influence; waiting for tools or material that should have been at the job site. The above definition is a summary of the definition of "Delay Allowances" as used in development of Engineered Performance Standards.

(4) Job Phase. The numbered chronological sequence in which work is accomplished regardless of the craft(s) involved. (See Craft Phase above).

(5) Job Preparation. All work and costs associated with receiving and considering a job assignment and instructions; planning equipment and material requirements; obtaining proper tools; laying out tools, material, and equipment; setting up ready to begin work; cleaning and storing tools and equipment; and cleanup of job site.

(6) Travel Time. Time expended between shop and the job site; waiting for vehicle; getting in and out of vehicle; loading and carrying a tool box; vehicle travel; unloading, walking from vehicle to job site; opening and closing door; and access to secure or controlled areas.

(7) Work Content Comparison. Work content comparison is a method of comparing a task that is not specifically defined in EPS Task Time Standards to a very similar task that is defined in the EPS Task Time Standards. This definition is a summary of a more detailed definition which appears on page 29 of the EPS Planner and Estimator’s Deskguide (NAVFAC P-701.0).

i. Facility. An establishment, structure, or assembly of units of equipment designated for a specific function.

j. Fixed Burden Rate (FBR). The additional costs (expressed in percent of direct material cost) for ordering, handling, and stockpiling materials for work included in the indefinite quantity, unit priced labor portion of the contract.

k. Frequency of Service

(1) Annual (A). Services performed once during each 12-month period of the contract at intervals of 335 to 395 days.

(2) Semiannual (SA). Services performed twice during each 12-month period of the contract at intervals of 160 to 200 calendar days.

(3) Quarterly (Q). Services performed four times during each 12-month period of the contract at intervals of 80 to 100 calendar days.

(4) Monthly (M). Services performed 12 times during each 12-month period of the contract at intervals of 28 to 31 calendar days.

(5) Semimonthly (SM). Services performed 24 times during each 12-month period of the contract at intervals of 14 to 16 calendar days.

(6) Weekly (W). Services performed 52 times during each 12-month period of the contract at intervals of six to eight calendar days.

(7) Daily (D5). Services performed once each day, Monday through Friday, including holidays unless otherwise noted.

(8) Daily (D7). Services performed once each day, seven days per week, including weekends and holidays.

!**********
NOTE TO SPECIFICATION WRITER: The following definition indicates that the Contractor's costs for travel associated with unit priced labor must be included in the unit prices bid for labor. This means that additional time for travel will **NOT** be included in work scopes for unit priced labor. If the user desires to include additional time for travel, delete the word "travel" in the third sentence.
**********!

l. Labor Hour Unit Price. A labor hour unit price is the unit price bid by the Contractor to provide one performance standard hour of work-in-place. The unit price includes all direct and indirect costs associated with performing one standard hour of work. The unit price would typically include the Contractor's hourly craft wage, adjusted to allow for the bidder's workforce productivity (i.e. the Contractor's estimate of how his/her workforce will perform in relation to the applicable performance standard(s)); and all costs for travel, pre-expended bin materials and supplies, profit, tools, equipment, field and home office overhead, clerical support, supervision, overtime, inspection, fees, taxes, licenses, permits, insurance, etc. In short, all costs associated with providing a specific standard hour of effort.

m. Maintenance/Repair. The preservation or restoration of a piece of equipment, a system, or a facility to such condition that it may be effectively utilized for its designated purposes. Maintenance/repair may be adjustment, overhaul, reprocessing, or replacement of constituent parts or materials that are missing or have deteriorated by action of the elements or usage, or

replacement of the entire unit or system if beyond economical repair.

n. Major Maintenance/Repair. Any individual incident of repair with a total estimated cost (labor and direct material) exceeding $!INSERT DOLLAR AMOUNT!. Major repair is not included in this contract. This exclusion does not apply if the repair is required to correct damage caused by the Contractor.

o. Pre-expended Bin Materials and Supplies. The minor materials and supplies that are incidental to a job, and for which the total direct cost of any one material line item shown on the material estimate is $10 or less. Examples of pre-expended bin materials and supplies include, but are not limited to, solder, lead, flux, electrical connectors, electrical tape, fuses, nails, screws, bolts, nuts, washers, spacers, masking tape, sand paper, solvent, cleaners, lubricants, grease, oil, rags, mops, glue, epoxy, spackling compound, joint tape, gases, refrigerants, refrigeration fittings, plumbers tape and compound, clips, welding rods, heat sinks, touch up paint, and plumbing fittings.

p. Quality Assurance (QA). A method used by the Government to provide some measure of control over the quality of purchased goods and services received.

q. Quality Assurance Evaluator (QAE). The Government employee designated by the Contracting Officer to be responsible for the monitoring of Contractor performance.

r. Quality Control (QC). A method used by the Contractor to control the quality of goods produced and services provided.

s. Regular Working Hours. The Government's regular (normal) working hours are from !INSERT STARTING HOUR! to !INSERT ENDING HOUR!, Mondays through Fridays except (a) Federal Holidays and (b) other days specifically designated by the Contracting Officer.

t. Response Time. The time allowed the Contractor after initial notification of a work requirement to be physically on the premises at the work site with appropriate tools, equipment, and materials, ready to perform the work required. Response times are designated in the appropriate technical clauses in Section C.

!**********
NOTE TO SPECIFICATION WRITER: Government-furnished property may include real property or personal property. The specification writer must clearly identify Government-furnished facilities, Government-furnished equipment, and Government-furnished material, if any. The following clauses should be modified as needed to fit the activity's specific situation and needs. Remember that if a CA program study is being conducted, decisions on whether or not to provide Government-furnished facilities and equipment must be based on an economic analysis. Refer to OPNAVINST 4860.7B.
**********!

C.4 GOVERNMENT-FURNISHED PROPERTY AND SERVICES. In accordance with the "GOVERNMENT-FURNISHED PROPERTY (FIXED-PRICE CONTRACTS)" clause in Section I, the Government will provide the Contractor the option of using certain Government owned !MODIFY AS REQUIRED! facilities, equipment, materials, and utilities for use only in connection with this contract. The use of Government-furnished

property and services for other purposes is prohibited. All such facilities, equipment, and materials will be provided in "as is" condition.

!SELECT EITHER a. OR a.(OPTIONAL)!

a. Government-Furnished Facilities. The Government will furnish or make available to the Contractor the facilities described in Attachment J-C1. The Contractor shall be responsible and accountable for such facilities accepted for use and shall take adequate precautions to prevent fire hazards, odors, and vermin. Janitorial services for Government-furnished facilities shall be provided by the Contractor. The Contractor shall obtain written approval from the Contracting Officer prior to making any modifications or alterations to the facilities. Any such modifications or alterations approved by the Government will be made at the expense of the Contractor. At the completion of the contract all facilities shall be returned to the Government in the same condition as received, except for reasonable wear and tear. The Contractor shall be held responsible for the cost of any repairs caused by negligence or abuse on his/her part, or on the part of his/her employees.

a.(OPTIONAL) Government-Furnished Facilities. The Government will not provide office space or operational facilities to the Contractor. The Contractor shall secure and maintain the necessary office space and other facilities required for the performance of this contract at his/her own expense.

!**********
NOTE TO SPECIFICATION WRITER: The specification writer must determine what equipment and material, if any, will be provided to the Contractor and select from the following paragraphs as appropriate. Equipment and material should normally not be provided unless economically justified under a CA program study. A possible exception is Civil Engineer Support Equipment (CESE) required for certain contract operational requirements, such as runway sweeping, weight handling services, etc. The capitalization needed by a Contractor to provide such equipment can be substantial, and will be reflected in the cost of the contract. Contact the major claimant and supporting Transportation Equipment Management Center for specific guidance.

Equipment and material listings should be placed in Attachments J-C2 and J-C3 respectively, including identification number, age, location, quantity, size or capacity, etc. Do **NOT** include equipment that will only be maintained by the Contractor, and not provided for his/her exclusive use, such as vehicles used for class A, B, and C assignments. Specific equipment maintenance requirements beyond the general requirements of this clause should also be detailed in these Attachments or the appropriate technical annex.

Use the appropriate "OPTIONAL" clause if no equipment or material will be provided to the Contractor.
**********!

!SELECT EITHER b. OR b.(OPTIONAL)!

b. Government-Furnished Equipment. The Government will provide the Contractor the use of existing and available Government owned tools and equipment in the performance of the contract. Such Government-furnished tools and equipment are listed in Attachment J-C2.

(1) The Contractor shall provide periodic servicing, maintenance, and repair of the equipment accepted for use at no cost to the Government, and the total or partial breakdown or failure of the Government-furnished equipment shall not relieve the Contractor of responsibility to fully perform the work of the contract. Upon completion or termination of the contract, all Government owned equipment shall be returned to the Government in the same condition as received, except for normal wear and tear. Equipment which becomes worn out due to normal wear and tear shall be returned to the Government and its replacement shall be the responsibility of the Contractor at no cost to the Government. Equipment so acquired shall remain the property of the Contractor. The Contractor shall be responsible for the cost of any repairs or replacement caused by negligence or abuse by the Contractor or his/her employees.

!**********
NOTE TO SPECIFICATION WRITER: Replace paragraph (1) above with the following if some replacement equipment, such as worn out runway sweepers, will be furnished by the Government.
**********!

(1)(OPTIONAL) Should the Contractor choose to use the Government-furnished equipment, periodic servicing, maintenance, and repair of the equipment listed shall be provided at no cost to the Government. The total or partial breakdown or failure of the Government-furnished equipment shall not relieve the Contractor of responsibility to fully perform the work of the contract. Upon completion or termination of the contract, all Government owned equipment shall be returned to the Government in the same condition as received, except for normal wear and tear. With the exception of the items specifically indicated in Attachment J-C2, equipment which becomes worn out due to normal wear and tear or is otherwise no longer desired by the Contractor shall be returned to the Government and replaced by the Contractor at no additional cost to the Government. Equipment so acquired shall remain the property of the Contractor. The Government will furnish replacements for those items of equipment indicated in Attachment J-C2 which, in the Contracting Officer's opinion, become beyond economical repair due to normal wear and tear.

(2) The Contractor and the Contracting Officer shall conduct a joint inventory before commencing work under this contract to determine the exact number and serviceability of Government-furnished equipment. The Contractor shall then certify the findings of this inventory, assume accounting responsibility, and subsequently report inventory discrepancies to the Contracting Officer. Government-furnished equipment shall not be removed from the military base unless approved by the Contracting Officer in writing.

b.(OPTIONAL) Government-Furnished Equipment. The Contractor shall furnish all tools and equipment required for the performance of this contract. The Government will not provide tools or equipment to the Contractor.

!SELECT EITHER c. OR c.(OPTIONAL)!

c. Government-Furnished Material. The Government will furnish the material described in Attachment J-C3 to the Contractor on a one time basis. The Contractor and the Contracting Officer shall conduct a joint inventory before commencing work to determine the exact amount and serviceability of Government-furnished materials. The Contractor shall then certify the findings of this inventory, assume accounting responsibility for all materials accepted for use, and provide documentation supporting issue/use of such material. Upon

depletion of material provided to the Contractor by the Government, the Contractor shall furnish all material to perform the work of the contract, except as otherwise specified herein. Upon completion or termination of this contract a second joint inventory shall be conducted, if necessary, of all unused Government-furnished materials. The Contractor shall be held liable for all materials which cannot be accounted for by issue/use documentation.

c.(OPTIONAL) Government-Furnished Material. The Government will not provide any materials to the Contractor.

!**********!
NOTE TO SPECIFICATION WRITER: The intent of the insurance item portion of the following optional paragraph is for the Government to provide the Contractor a minimum initial issue of critical, hard to come by parts, then require the Contractor to maintain no less than that quantity on hand at all times so that repairs to critical equipment/systems will not be delayed by long material delivery times. Typical insurance items would include out of stock components on very old mechanical equipment that would need to be specially produced by the manufacturer. Do **NOT** attempt to use this paragraph to force the Contractor to maintain minimum stock levels of ordinary repair parts/materials.
!**********!

c.(OPTIONAL) Government-Furnished Material. The Government will furnish the material described in Attachment J-C3 to the Contractor on a one time basis. The Contractor and the Contracting Officer shall conduct a joint inventory before commencing work to determine the exact amount and serviceability of Government-furnished materials. The Contractor shall then certify the findings of this inventory, assume accounting responsibility for all materials supplied, and provide documentation supporting issue/use of such material.

(1) Upon depletion of material provided to the Contractor by the Government, as listed in Part A of Attachment J-C3, the Contractor shall furnish all material to perform the work of the contract, except as otherwise specified herein. Upon completion or termination of this contract a second joint inventory shall be conducted, if necessary, of all unused Government-furnished materials, as listed in Part A of Attachment J-C3. The Contractor shall be held liable for all materials missing which cannot be accounted for by issue/use documentation.

(2) Experience has shown that certain repair parts and materials requiring long procurement lead times must be stocked and on hand to insure that timely repairs may be made to critical systems and equipment. A list of these so called "insurance items" and minimum stocking levels are contained in Part B of Attachment J-C3. The Government will provide the Contractor an initial issue of all items in at least the minimum quantities listed in Part B of Attachment J-C3. The Contractor shall maintain at least the minimum quantity of all the items specified. These items shall be used by the Contractor in the maintenance and repair of the facilities/systems only as follows:

(a) Insurance items shall be used on the systems, facilities, or GFE with which they are associated.

(b) A replacement insurance item shall be ordered within three working days after the use of any insurance item which causes the total quantity on hand to fall below the minimum specified level. The Contractor shall bear the cost of replacement of all insurance items.

(c) Upon completion or termination of the contract a second joint inventory shall be conducted and all insurance items returned to the Government in the minimum specified quantities.

d. Availability of Utilities. The Government will furnish the following utility services at existing outlets for use in those facilities provided by the Government, and as may be required for the work to be performed under the contract: electricity, steam, natural gas, fresh water, sewage service, and refuse collection (from existing collection points). Information concerning the location of existing outlets may be obtained from the Contracting Officer. The Contractor shall provide and maintain, at his/her expense, the necessary service lines from existing Government outlets to the site of work.

!SELECT EITHER (1) OR (1)(OPTIONAL)!

(1) Utilities specified above will be furnished at no cost to the Contractor.

(1)(OPTIONAL) The Contractor shall pay for utilities consumed and shall, at his/her expense, install meters as required by the Contracting Officer to measure consumption of utilities provided by the Government. Rates for reimbursement to the Government of metered utilities will be: !LIST THE RATES OF REIMBURSEMENT PER TYPE OF SERVICE PROVIDED!

(2) A restricted telephone line (USOC Class RS4) for on base calls will be provided by the Government at no cost to the Contractor. The Contractor shall install commercial telephone service, and all service and toll charges shall be paid for by the Contractor.

C.5 CONTRACTOR FURNISHED ITEMS. Except for the items listed in clause C.4, the Contractor shall provide all facilities, equipment, materials, and services to perform the requirements of this contract.

a. The Contractor shall provide new or factory reconditioned parts and components when providing maintenance and repair services as described herein. All replacement units, parts, components, and materials to be used in the maintenance, repair, and alteration of facilities and equipment shall be compatible with that existing equipment on which it is to be used; shall be of equal or better quality than original equipment specifications; shall conform to the applicable specifications listed in Attachment J-H1 and the technical specifications, Section C; and used in accordance with original design and manufacturer intent. Items not listed in Attachment J-H1 or technical specifications shall be of acceptable industrial grade and quality. If the original manufacturer has updated the quality of parts for current production, parts supplied under this contract shall equal or exceed the updated quality. The Contractor shall retain the parts replaced for at least ten working days after completion of the job and make these parts readily available for inspection by the Contracting Officer upon request. If a dispute should arise concerning material or supplies selected by the Contractor for work already accomplished, the Contractor must, upon direction of the Contracting Officer, remove, replace, or rework materials and supplies so that the work complies with contract requirements. The "CHANGES" clause states the procedure the Contractor needs to follow to submit the removal, replacement, or rework as a "change" to the contract. The Contractor shall obtain and maintain manufacturer’s operating instructions and maintenance manuals on all new equipment installed by the

Contractor. These documents shall become property of the Government and shall be turned into the Contracting Officer within five working days after completion or termination of the contract.

b. The Contractor shall submit certificates of compliance, manufacturer's descriptive data, and product samples for those items specified in paragraph 2 of Attachment J-C4. Such submittals shall be made to the Contracting Officer within 15 calendar days after award of the contract.

(1) Certificates of compliance shall be obtained from material manufacturers attesting that materials meet the requirements specified in Attachment J-C4.

(2) Manufacturer's descriptive data shall include the name of the manufacturer, model number or other identifying information, catalog cut, and other identifying data and information describing the performance, capacity, rating, and application/installation instructions which clearly illustrate that the proposed item meets the applicable standards specified in Attachment J-H1.

(3) Product samples shall include a sufficient quantity of material to allow for complete analysis and evaluation by the Government.

c. The company name shall be displayed on each of the Contractor's vehicles in a manner and size that is clearly visible. All vehicles shall display a valid state license plate and safety inspection sticker, and shall be maintained in good repair.

C.6 MANAGEMENT. The Contractor shall manage the total work effort associated with the operations, maintenance, repair, and all other services required herein to ensure fully adequate and timely completion of these services. Such management includes, but is not limited to, planning, scheduling, cost accounting, report preparation, establishing and maintaining records and inventories, warranty enforcement, and quality control. The Contractor shall provide an adequate staff of personnel with the necessary management expertise to assure the performance of the required work.

a. Work Control. The Contractor shall implement all necessary work control procedures to ensure fully adequate and timely completion of work requirements, as well as to permit tracking of work in progress. The Contractor shall plan and schedule work to assure material, labor, and equipment are available to complete work requirements within the specified time limits and in conformance with the quality standards established herein. Verbal scheduling and status reports shall be provided when requested by the Contracting Officer. The status of any item of work must be provided within !INSERT NUMBER! hours of the inquiry during regular working hours, and within !INSERT NUMBER! hours after regular working hours.

!**********
NOTE TO SPECIFICATION WRITER: In the following paragraph specify those areas or buildings, if any, where work must be scheduled to be accomplished during specific time periods, such as other than during regular working hours. Restrictions unique to specific functional areas should be specified in the appropriate annex, not below.
**********!

b. Work Schedule. The Contractor shall schedule and arrange work so as to cause the least interference with the normal occurrence of Government business and mission. In those cases where some interference is unavoidable, the Contractor shall make every effort to minimize the impact of the interference and its effects.

c. Work Outside Regular Working Hours. Except as may otherwise be specified, all work shall be performed during the Government's regular working hours. If the Contractor desires to carry on work on Saturday, Sunday, holidays, or outside regular working hours, he/she must obtain the written approval of the Contracting Officer.

!**********
NOTE TO SPECIFICATION WRITER: Reports and information which the Government periodically needs from the Contractor should be specified in the technical specifications, either in the basic specification or in the appropriate annex, then listed in Attachment J-C5 so that all reporting requirements are summarized and sample formats are contained in one place.

Add requirements below for any general management records and reports which apply to the overall contract, i.e., not to a specific annex. The facility history file record and cost accounting report requirements are provided for illustration.
**********!

d. Records and Reports. The Contractor shall maintain management, operation, and maintenance records and prepare management, operation, and maintenance reports as set forth in Attachment J-C5, "LIST OF REQUIRED RECORDS AND REPORTS". All records and copies of reports shall be turned over to the Contracting Officer within five calendar days after contract completion.

(1) A completed work file for each structure (identified by structure number) shall be maintained by the Contractor. Each file shall contain a listing of all equipment in the structure by nomenclature and manufacturer's model number, as well as all manufacturer's literature, brochures, and pamphlets; maintenance, operator's, and parts list manuals; warranty information; a copy of all completed Emergency/Service Authorization Forms, indefinite quantity delivery orders, and preventive maintenance inspection reports; and other information pertaining to the facility and/or installed equipment and systems. The Government will have access to these files upon request. All documents shall be filed within ten calendar days of the completed transaction. The entire file shall be turned over to the Government upon completion of the contract.

(2) Cost Accounting information shall be maintained and submitted in compliance with the specific requirements set forth in Attachment J-C5. This report shall be submitted with, and are considered part of, the monthly payment invoice.

e. Building Managers. Within 10 calendar days following award of this contract, the Contracting Officer will provide the Contractor with a list of building managers. The Contractor shall notify the building manager of any work to be performed in a building under his/her control that would tend to disrupt the conduct of normal Government business, at least two working days in advance of such work. Notification shall include the type of work to be done and the estimated completion date. The Contractor shall reschedule any work that the

Contracting Officer deems necessary to avoid unacceptable disruptions in the Government's business.

f. Staffing. The Contractor shall continuously maintain an adequate staff with suitable management expertise to assure work is scheduled and completed in accordance with these specifications. The Contractor shall maintain a work force capable of completing work in accordance with the time and quality standards specified.

g. Continuity of Services. To insure continuity of essential services, the Contractor shall be prepared to fully commence work on the start date of this contract, and should not assume that Government or previous Contractor employees will be available to guide, direct, or specifically orient each Contractor employee.

C.7 GENERAL REQUIREMENTS AND PROCEDURES

a. Standards. All work shall meet the standards specified herein and shall be accomplished in conformance with approved and accepted standards of the industry; equipment manufacturers; all applicable activity, local, state, and federal standards; and all applicable building and safety codes.

(1) When the Contractor completes work on a facility, system, or piece of equipment, that facility, system, or equipment shall be free of missing components or defects which would prevent it from functioning as originally intended and/or designed. Corrective or repair/replacement work shall be carried to completion including operational checks and cleanup of the job site. Except where otherwise noted, replacements shall match existing in dimensions, finish, color, and design.

(2) During and at completion of work, debris shall not be allowed to spread unnecessarily into adjacent areas nor accumulate in the work area itself. All such debris, excess material, and parts shall be cleaned up and removed at the completion of the job and/or at the end of each day work is in progress.

b. Replacement, Modernization, Renovation. During the term of the contract, the Government may replace, renovate, or improve equipment, systems, facilities, components, and fixtures at the Government's expense and by means not associated with this contract. All replaced, improved, updated, modernized, or renovated equipment, fixtures, facilities, components, and systems shall be maintained, operated, and/or repaired by the Contractor at no additional cost to the Government unless such changes result in an increase or decrease in contract requirements. Changes, replacements, or deletions which result in an increase or decrease in contract requirements will result in adjustments to the contract price in accordance with the "CHANGES" clause, Section I.

c. Equipment Under Manufacturer's or Installer's Warranty. Equipment, components, and parts, other than that installed under this contract, shall not be removed or replaced or deficiencies corrected while still under warranty of the manufacturer or the installer without prior approval of the Contracting Officer. All defects in material or workmanship, defective parts, or improper installation and adjustments found by the Contractor shall be reported to the Contracting Officer so that necessary action may be taken. The Contractor shall be knowledgeable of the equipment, parts, and components that are covered by warranty and the duration of such warranties. Available warranty information will be furnished to the Contractor by the Contracting Officer.

d. As Built Drawings

(1) As built drawings will be made available to the Contractor for information only. The Government makes no representation as to the completeness or accuracy of these drawings.

(2) All changes to or additions to buildings, structures, and related equipment and systems made by the Contractor shall be recorded by the Contractor and provided to the Contracting Officer within !INSERT NUMBER! calendar days of the completed work. This data shall include, but is not limited to, dimensioned drawings and/or sketches.

!**********
NOTE TO SPECIFICATION WRITER: Modify or delete the following paragraph if not applicable. For example, if another Contractor (or in-house forces) operates a system to be maintained under this contract, the responsibilities of each must be specifically spelled out.
**********!

e. Interface With Other Contractors and Government Forces. Attention is invited to the fact that other Contractors !AND/OR GOVERNMENT FORCES! are engaged in similar and supporting work, requiring close cooperation. The Contractor for this contract shall cooperate with all other Contractors and avoid conflicts with other Contractors' performance and work schedules. In the event of conflicts with other Contractors that cannot be satisfactorily resolved, the matter shall be referred to the Contracting Officer for decision. Such decisions shall be final, subject to right of appeal in accordance with the "DISPUTES" clause, Section I.

f. Damages Caused by Weather Conditions or Vandalism. Work required to repair facilities or equipment damaged by inclement weather conditions and/or acts of vandalism shall be performed at no additional cost to the Government if such work is within the scope of a service call. The historical data in Attachment J-C7 includes such instances of repair.

g. Refrigerant Recycling. The Contractor shall not knowingly vent or otherwise dispose of any refrigerant in a manner which would permit their release into the environment. Refrigerants shall be captured and recycled in conformance with all applicable federal, state, and local laws and regulations.

!**********
NOTE TO SPECIFICATION WRITER: When tailoring the following paragraph remember that Davis-Bacon wage provisions will apply to any service call which 1) includes alteration work requirements, or 2) requires 32 or more estimated labor hours for accomplishment. If Davis-Bacon wages are not to be included in the contract, delete the word "alteration" in the first sentence. See User's Guide paragraph III.B.4 for additional information on Davis-Bacon requirements, and paragraph III.C.2.a for general considerations on tailoring the service call provisions below.
**********!

C.8 GENERAL REQUIREMENTS AND PROCEDURES FOR SERVICE CALL WORK. Service calls are defined as maintenance, repair, alteration, or other miscellaneous work requirements which are called into the work reception center by customers (building or family housing occupants), or are generated by designated

Government representatives; require not more than !INSERT NUMBER! estimated total labor hours for accomplishment; and require not more than $!INSERT DOLLAR AMOUNT! in total direct material costs, to include parts or entire unit replacement. Multiple maintenance and repair requirements received for the same building or structure will be combined into one service call. All service call work is included in the firm fixed-price portion of the contract.

!**********
NOTE TO SPECIFICATION WRITER: Use paragraph a below if Davis-Bacon service calls **WILL** be included in the contract, and paragraph a.(OPTIONAL) if they **WILL NOT**.
**********!

a. Labor and Material Requirements

(1) Labor. All service calls shall be subject to Service Contract wage rates with the exception of calls for alteration services, which shall be subject to Davis-Bacon wage rates. The Contracting Officer will determine which wage rate is applicable in questionable situations. When questions arise concerning the labor hours required for a particular job, labor hour requirements will be based on Engineered Performance Standards (EPS) Manuals (NAVFAC P-700 series) or, if not applicable, other estimating sources.

!**********
NOTE TO SPECIFICATION WRITER: Use the following (OPTIONAL) subparagraph **ONLY** if the service call limit established in C.8 above is 32 labor hours or more, or if the User includes a different type of service call limit which would allow some calls to exceed 32 hours.
**********!

(1)(OPTIONAL) Labor. Service calls estimated to require less than 32 labor hours will be subject to Service Contract wage rates. Calls estimated to require 32 labor hours or more, or which include alteration requirements, will be subject to Davis-Bacon wage rates. The Contracting Officer will determine which wage rate is applicable in questionable situations. When questions arise concerning the labor hours required for a particular job, labor hour requirements will be based on Engineered Performance Standards (EPS) Manuals (NAVFAC P-700 series) or, if not applicable, other estimating sources.

(2) Materials. When questions arise concerning the cost of materials, material costs will be based on the lowest of quotes provided by the Contractor from at least three different commercial vendors for the actual direct cost of materials. The Government retains the right to obtain additional quotes in questionable situations, and the lowest price obtained will be used. The Contractor shall maintain sufficient off-the-shelf materials and equipment on hand to support service call work requirements. Lack of availability of materials or equipment will not relieve the Contractor from the requirement to complete service call work within the time limits specified.

a.(OPTIONAL) Labor and Material Requirements

(1) Labor. All service call work is subject to Service Contract wages. When questions arise concerning the labor hours required for a particular job, labor hour requirements will be based on Engineered Performance Standards (EPS) Manuals (NAVFAC P-700 series) or, if not applicable, other estimating sources.

(2) Materials. When questions arise concerning the cost of materials, material costs will be based on the lowest of quotes provided by the Contractor from at least three different commercial vendors for the actual direct cost of materials. The Government retains the right to obtain additional quotes in questionable situations, and the lowest price obtained will be used. The Contractor shall maintain sufficient off-the-shelf materials and equipment on hand to support service call work requirements. Lack of availability of materials or equipment will not relieve the Contractor from the requirement to complete service call work within the time limits specified.

!**********
NOTE TO SPECIFICATION WRITER: Since there are many factors which affect the way the work reception function operates, the following sample paragraph must be carefully tailored. Will the Government or the Contractor receive service calls from customers? Will the Government and Contractor work reception centers be linked via computer? If so, will the Contractor be on line and capable of entering information into the system? See User's Guide paragraph III.C.2.a(2) for additional information on these and other issues which must be considered.
**********!

b. Service Call Reception

(1) Regular Working Hours. The Government's work reception center will receive service call requests during regular working hours and classify each call in accordance with the definitions provided below. A description of the problem or requested work, date and time received, location, classification, contact phone number(s), applicable wage rate, and other appropriate information will be placed on a Service Call Work Authorization Form (see Attachment J-C6) and made available for pickup by the Contractor at the Government's work reception center. If the call is classified as emergency or urgent the Government's work receptionist will notify the Contractor by phone that a call has been received and that a work authorization form is available for pickup. Emergency and urgent calls shall be considered as received by the Contractor at the time and date this telephone call is made.

(2) After Regular Working Hours. The Contractor shall receive all service call requests directly from customers and other authorized Government representatives after regular working hours, on weekends, and holidays. Calls shall be received and classified by the Contractor as emergency, urgent, or routine in accordance with the definitions provided in the "Service Call Classification" paragraph of this clause, and responded to accordingly. If the call is classified as emergency or urgent, the Contractor shall fill out a Service Call Work Authorization Form, including order number, description of the problem, date and time received, facility identification and location, and caller's name and telephone number. If the call is classified as routine, the Contractor shall record the same information, but will not fill out a work authorization form. One copy of each emergency and urgent work authorization form and a log of **ALL** other calls received shall be delivered to the Government's work reception center by !INSERT TIME! the next regular working day. The Contracting Officer may upgrade or downgrade the classification of any service call received by the Contractor.

c. Service Call Classification

(1) Emergency calls. Service calls will be classified as emergency at the discretion of the Contracting Officer. Generally, calls will be classified

as an emergency when the work consists of correcting failures which constitute an immediate danger to personnel, threaten to damage property, or threaten to disrupt activity operations or training missions. Examples include outages in utility systems which support training equipment or provide other vital services, overflowing drains, roof leaks, broken water pipes, electrical defects which may cause fire or shock, gas leaks, etc. No more than !INSERT PERCENTAGE!% of the service calls issued to the Contractor will be classified as emergency.

(2) Urgent calls. Service calls will be classified as urgent at the discretion of the Contracting Officer. Generally, calls will be classified as urgent when the work involves providing services or correcting failures which do not immediately endanger personnel, property, or activity missions; but would soon inconvenience and/or affect the health or well being of personnel, lead to property damage, or lead to disruptions in operational or training missions. Calls will also be classified as urgent when the service or failure has upper level or command/management attention. No more than !INSERT PERCENTAGE!% of the service calls issued to the Contractor will be classified as urgent.

(3) Routine Calls. A service call will be classified as routine when the work does not qualify as an emergency or urgent call. Routine calls shall be considered as received by the Contractor at the time and date the work reception center makes the work authorization form available for pickup.

d. Response to Service Calls. The Contractor shall have adequate procedures for picking up service call work authorizations from the Government's work reception center during regular working hours, and for receiving and responding to emergency and urgent service calls 24 hours per day, seven days a week, including weekends and holidays. A single local or toll free telephone number shall be provided by the Contractor for receipt of all service calls. All telephone calls shall be answered within 30 seconds by an individual fully familiar with the Contractor's work control procedures and the terms and conditions of this contract.

!**********
NOTE TO SPECIFICATION WRITER: The user must insert response and completion times as required to suit the activity's needs.
**********!

(1) Response by Classification

(a) Emergency Calls. The Contractor shall respond immediately and must be on the job site and working within !INSERT NUMBER! minutes after receipt of an emergency service call. The Contractor shall work continuously without interruption and shall arrest the emergency condition before departing the job site (e.g., shut off water, close gas valve, temporarily patch roof leak, etc.). If further labor and material (follow up work) are required to complete the repair, the call will be reclassified as either urgent or routine, as appropriate, and the corresponding completion time will then apply. Such follow up work shall be considered part of the original service call. If the follow up work is beyond the scope of a service call the procedures in paragraphs C.8.d(2) or C.8.d(3) below shall apply.

(b) Urgent Calls. The Contractor shall be on the job site and working within !INSERT NUMBER! hours after receipt of an urgent service call received during regular working hours, and within !INSERT NUMBER! hours for

urgent calls received after regular working hours, on weekends, or holidays. Once begun, the work shall be prosecuted to completion and must be completed within !INSERT NUMBER! hours.

(c) Routine Calls. All routine service calls shall be completed within !INSERT NUMBER! working days of receipt. Routine calls shall normally be accomplished during regular working hours, Monday through Friday.

(2) Beyond the Scope of Urgent Call. If the Contractor responds to an urgent service call and believes that the work required is beyond the scope of a service call, as defined above, the Government's work reception center (during regular working hours) or !INSERT COMMAND DUTY OFFICER OR OTHER APPROPRIATE INDIVIDUAL! (after regular working hours) must be contacted within one hour. If requested by the Contracting Officer, the Contractor shall provide a summary of the work needed and a detailed EPS estimate showing labor hour and material requirements within !INSERT NUMBER! hours of the request.

(a) If the Contracting Officer agrees that the work required is beyond the scope of a service call, the Contracting Officer may authorize the Contractor to proceed with the work in accordance with the "CHANGES" clause, Section I, or the work authorization may be canceled.

(b) If the Contracting Officer determines that the work falls within the scope of a service call, the original work authorization will be returned to the Contractor, who shall complete the work. Payment deductions and liquidated damages will be taken if the work is not completed by the original time limit established when the call was received.

(3) Beyond the Scope of Routine Call. If the Contractor responds to a routine service call and believes that the work required is beyond the scope of a service call, as defined above, the work authorization form shall be returned to the work reception center no later than !INSERT TIME! the following workday. The Contractor shall attach a summary of the work needed and a detailed EPS estimate showing labor hour and material requirements. The Contracting Officer may waive the requirement to submit estimates in cases where the scope of work is clearly beyond that of a service call.

(a) If the Contracting Officer agrees that the work required is beyond the scope of a service call, the scope of the work will be reduced and a new service call work authorization issued by the Government, or the original work authorization will be canceled. If the original work authorization is canceled, the work will be accomplished under the indefinite quantity portion of the contract or by means other than this contract.

(b) If the Contracting Officer determines that the work falls within the scope of a service call, the original work authorization will be returned to the Contractor, who shall complete the work. Work on such calls shall still be completed within !INSERT NUMBER! working days from the original receipt date/time, plus the amount of time the work authorization was held by the Contracting Officer for determination.

e. Completed Calls. Within one working day after completion of each service call the Contractor shall add the following information to the work authorization form and return to the work reception center:

(1) Description of work actually completed.

(2) Brief description of material and parts used, including quantities.

(3) Date and time work began.

(4) Date and time work was completed.

(5) Hours of labor (by craft) expended.

(6) Signature or initials of the Contractor's craftsman performing the work (or supervisor), indicating that the work has been completed.

f. Historical Data. Data on the numbers and types of service calls of each classification that have historically been performed are included in Attachment J-C7.

!**********
NOTE TO SPECIFICATION WRITER: The procedures specified in the following clause are of a general nature, and apply to almost all the recurring services included in the technical annexes. More specific requirements that are unique to the functional area should be included in the applicable annex. For example, this clause contains general procedures for the scheduling and accomplishment of preventive maintenance (PM) inspections; however, specific information on PM checkpoints and frequencies for HVAC equipment, fire protection systems, etc., must be inserted by the user in the applicable annexes for these systems.
**********!

C.9 GENERAL REQUIREMENTS AND PROCEDURES FOR RECURRING WORK. Recurring operation, maintenance, repair, and other miscellaneous work shall be performed by the Contractor in accordance with the provisions of this clause and Annexes 1 through !INSERT NUMBER!. Recurring work includes all contract requirements for which schedules of accomplishment have been included in the contract, or for which the Contractor is required to submit schedules for Government approval. Unless specified otherwise, all recurring work is included in the firm fixed-price portion of the contract. The Contractor shall provide and store the parts and materials necessary for the continued performance of all recurring work as specified herein. Lack of availability of materials and parts shall not relieve the Contractor from the requirement to complete work within the time requirements and quality standards specified herein.

a. Equipment Operation. The Contractor shall furnish personnel as required to provide the watchstanding and equipment operation requirements specified in each technical annex. Maintenance and repair services performed by watchstanding and operation personnel as part of their shift responsibilities is included as a part of equipment operation.

!**********
NOTE TO SPECIFICATION WRITER: A list of systems and equipment that require PM must be shown in attachments to each annex that includes PM requirements. These attachments must also indicate, for each system and piece of equipment, the frequencies that PM will be performed and the standard checkpoints and services to be provided. Sample PM lists with frequencies and checkpoints are provided in individual functional area GPWSs.

The user must insert dollar and time limits per PM inspection in the following paragraph. Remember that the intent of preventive maintenance is to perform

routine maintenance and to **IDENTIFY** needed repairs, **NOT** to perform extensive repair work. Repair requirements should first be screened by the FMED then, if appropriate, performed by service call or indefinite quantity delivery order. With this in mind, the repair limits set below should be based on the number, size, complexity, and condition of the equipment to be PMed. Suggested limits are one hour and $50.
**********!

b. Preventive Maintenance. The Contractor shall perform preventive maintenance (PM) inspections on the systems and equipment listed in Attachments J-C1-2, J-C2-3, J-C5-2, and !ETC! in accordance with the procedures specified in this clause **AND** the applicable individual technical annexes. PM consists primarily of inspection, testing, cleaning, lubrication, adjustment, calibration, and minor part and component replacement (e.g. filters, batteries, belts, hoses, fluids, oil and grease) as required to verify proper system operation; minimize malfunction, breakdown, and deterioration of systems and equipment; and identify and/or perform any repairs required to bring the equipment up to the manufacturer's operating standards. All identified repairs shall be completed as part of the PM provided that such repairs can be made within !INSERT NUMBER! estimated direct labor hours or less, and the total direct material cost does not exceed $!INSERT DOLLAR AMOUNT!. These time and dollar limits apply to each PM inspection for each individual piece of equipment or equipment system.

(1) PM shall be performed at least as frequently and shall, at a minimum, include all of the applicable check points and services indicated in the technical annexes. The Contractor may, at his/her option and at no additional cost to the Government, increase the level and/or frequency of PM in an effort to minimize repair requirements. The Government will provide the manufacturer's recommended PM schedule, as available, and other available manuals, pamphlets, etc. to the Contractor.

!**********
NOTE TO SPECIFICATION WRITER: From the PM frequencies specified in the attachments of each applicable annex, the Contractor will normally be required to develop and submit a detailed PM schedule for approval by the Contracting Officer. As an alternate, the user may want to require the Contractor to use one or more previously developed schedules, which would also be included in an attachment. Choose the first "OPTIONAL" clause below if all PM schedules will be included in the contract. Choose the second "OPTIONAL" clause, including subparagraphs (a) and (b), if schedules will be included only for certain functional areas.

If the base period of the contract will be less than 12 months in length, the user must tailor the appropriate attachments in Section J so that it is clear what specific PMs will be performed during the base period. For example, indicate which annual PMs will be performed during the base period.
**********!

(2) The Contractor shall submit a detailed PM schedule to the Contracting Officer for approval at least 15 calendar days prior to the start date of the contract. The schedule shall cover the entire term of the contract and shall include, for each system or item of equipment and each PM inspection required in the contract, the location (facility and/or equipment number); work to be performed (e.g., monthly PM); and the week of the month that semimonthly or less frequent PMs will be performed, and the day of the week that weekly or

more frequent PMs will be performed. The schedule shall be in a format such that the completion of each PM inspection may be indicated on the schedule.

(a) PM inspections may be scheduled at the Contractor's discretion unless specific requirements or restrictions are included elsewhere in the contract.

(b) Once the Contractor's PM schedule is approved by the Contracting Officer, PM inspections shall be performed by the Contractor without further authorization by the Contracting Officer. The Contractor shall strictly adhere to the scheduled PM dates to facilitate Government verification of work. If the Contractor finds it necessary to reschedule PM, a written request shall be made to the Contracting Officer detailing the reasons for the proposed change at least five working days prior to the originally scheduled PM date. No scheduled PM dates shall be changed without the prior written approval of the Contracting Officer.

(2)(OPTIONAL) The Contractor shall perform PM inspections in accordance with the schedule provided in the applicable annexes. The Contractor shall strictly adhere to the scheduled PM dates to facilitate Government verification of work. If the Contractor finds it necessary to reschedule PM, a written request shall be made to the Contracting Officer detailing the reasons for the proposed change at least five working days prior to the originally scheduled PM date. No scheduled PM dates shall be changed without the prior written approval of the Contracting Officer.

(2)(OPTIONAL) The Contractor shall perform the PM inspections required by Annexes 1, 5, and 6 in accordance with the schedules specified and provided in the referenced attachments. A detailed PM schedule shall be developed and submitted to the Contracting Officer for approval at least 15 calendar days prior to the start date of the contract for the PM inspections required by Annexes 2, 3, and 4.

(a) The schedule shall cover the entire term of the contract and shall include, for each system or item of equipment and PM inspection required by the contract, the location (facility and/or equipment number); work to be performed (e.g., monthly PM); and the week of the month that semimonthly or less frequent PMs will be performed, and the day of the week that weekly or more frequent PMs will be performed. The schedule shall be in a format such that the completion of each PM inspection may be indicated on the schedule. PM inspections may be scheduled at the Contractor's discretion unless specific requirements or restrictions are included elsewhere in the contract. Once the Contractor's PM schedule is approved by the Contracting Officer, these PM inspections shall be performed by the Contractor without further authorization by the Contracting Officer.

(b) The Contractor shall strictly adhere to the scheduled PM dates to facilitate Government verification of work. If the Contractor finds it necessary to reschedule PM, a written request shall be made to the Contracting Officer detailing the reasons for the proposed change at least five working days prior to the originally scheduled PM date. No scheduled PM dates shall be changed without the prior written approval of the Contracting Officer.

(3) The Contractor shall submit a copy of the previous week's portion of the PM schedule to the Contracting Officer by !INSERT TIME! each Monday indicating the scheduled PM inspections completed during the previous week, and

those scheduled inspections not completed. If inspections were performed which were deferred from previous weeks, they shall be noted on an attachment to the submittal. Also attached shall be:

(a) A list of equipment deficiencies noted during the PM inspections which are beyond the scope of work of preventive maintenance, as defined in paragraph C.9.b. These reports shall provide a detailed description of identified deficiencies. The Contracting Officer may issue a service call work authorization or delivery order for indefinite quantity work, as appropriate, for correction of the deficiencies noted; the work may be performed by means other than this contract; or the work may be deferred due to lack of funds, etc. If at the time of the inspection, the Contractor feels it would be more economical to make such repairs while conducting the inspection, such as while a valve is open for cleaning and inspection, the Contractor may notify the Contracting Officer by phone of the defect and request a work authorization to make the repair at that time.

(b) Any reports, data, or submittals required as part of a specific PM inspection.

!**********
NOTE TO SPECIFICATION WRITER: Tailor the following paragraph if facility history files are to be maintained by the Government.
**********!

(4) The Contractor shall complete and maintain a Preventive Maintenance Inspection Record form for each item of equipment and system on which PM is performed. The completed forms shall be maintained by the Contractor in the facility history file throughout the term of the contract (see "Records and Reports" paragraph of the "MANAGEMENT" clause). A copy of the Preventive Maintenance Inspection Record form is included in Attachment J-C5.

(5) To facilitate Government verification of PM inspections, the Contractor shall date stamp or mark all replacement items such as filters, belts, etc. with the date changed. Government-furnished PM record cards or tags shall be attached by the Contractor, in a conspicuous location, to each item of equipment requiring PM during its initial inspection. The Contractor’s mechanic shall initial and date these cards or tags upon completing each PM inspection, indicating that the scheduled PM has been completed.

c. Other Recurring Work. Requirements for other miscellaneous recurring services are included in each of the technical annexes.

!**********
NOTE TO SPECIFICATION WRITER: If the user decides not to include unit priced labor provisions in the contract, but still wants to include indefinite quantity unit priced tasks, delete the following clause in its entirety and replace with the C.10(OPTIONAL) clause.
**********!

C.10 GENERAL REQUIREMENTS AND PROCEDURES FOR INDEFINITE QUANTITY WORK. Contract requirements which cannot be defined in sufficient detail to be included in the firm fixed-price portion of the contract, or which are beyond the scope of a service call (as defined in the "GENERAL REQUIREMENTS AND PROCEDURES FOR SERVICE CALL WORK" clause), will be included in the indefinite quantity portion of the contract.

a. Categories of Indefinite Quantity Work. There are two categories of indefinite quantity work included in the contract, unit priced tasks and unit priced labor.

(1) Unit Priced Tasks. Unit priced work items are included in the Schedule of Indefinite Quantity Work - Unit Priced Tasks, Section B. The unit prices bid include all labor, material, and equipment necessary to perform the specified task. Unit priced tasks may be ordered to be accomplished as stand alone services, or in combination with unit priced labor.

(2) Unit Priced Labor. Unit priced labor rates are set forth in the Schedule of Indefinite Quantity Work - Unit Priced Labor, Section B. Material and equipment requirements associated with unit priced labor will be reimbursed in accordance with the procedures specified in the "Ordering Unit Priced Labor" paragraph below.

b. Ordering Unit Priced Tasks. When unit price tasks are ordered as stand alone items or in conjunction with other unit priced tasks, delivery orders shall indicate the item(s), number of units, location of the work, and other pertinent information in accordance with the "PROCEDURES FOR ISSUING ORDERS" clause in Section G.

c. Ordering Unit Priced Labor. The Contractor shall be paid a negotiated fixed-price for each delivery order which includes unit priced labor, as specified in the following procedures.

(1) General Procedures. The Government will provide the Contractor a detailed scope of work developed according to the procedures specified in the "Preparation of Work Scopes" paragraph below for each proposed delivery order for unit priced labor. The Contractor shall review the Government's scope of work and indicate specific areas of disagreement in accordance with the procedures specified in the "Contractor's Review of Proposed Work Scopes" paragraph below. After the Contracting Officer reviews the Contractor's proposed material/equipment unit prices and proposed scope changes, he/she will revise the Government's scope of work and/or negotiate any remaining areas of disagreement over work scope or material/equipment unit prices with the Contractor. The approved scope of work then becomes a fixed-price delivery order for the work described.

!**********
NOTE TO SPECIFICATION WRITER: If scopes of work will be developed on the Public Works Management Automation (PWMA) Facilities Engineering Job Estimating (FEJE) module, the following procedures may need to be altered slightly.
**********!

(2) Preparation of Work Scopes. The Government's detailed scope of work will be provided on DD Form 2167, Job Phase Calculation Sheet, and will include: (1) the scope of work to be performed, (2) the number of hours set forth in the work performance standard to perform the given scope of work, (3) the number of unit priced tasks required to perform the required scope of work, (4) an identification of specific work tasks for which there are no applicable performance standards, and (5) the projected quantity of materials and equipment required to perform the required scope of work. Any portion of the work required which has been bid as unit priced tasks will be priced using the unit prices set forth in the bid schedule.

!**
NOTE TO SPECIFICATION WRITER: EPS is used as the primary basis for determining the number of unit priced labor hours required to accomplish any given job requiring unit priced labor. The user may choose to specify another primary source for labor hour standards, such as those published by R. S. Means Company, and modify the following clause accordingly.

Travel time is not included in the procedure for determining labor requirements described in the following paragraph, since it is assumed that no Government-furnished facilities (which are located in EPS travel zone zero) are to be provided for the Contractor's use. If such facilities are to be provided, the user should consider deleting the words "travel (travel zone 0 (shop) will be used when applying total craft time to the EPS nomograph)" from the next to last sentence, and make other changes as appropriate to allow travel time to be included in the EPS determination of labor hour requirements. Ensure that corresponding changes are made to the "Labor Hour Unit Price" definition in the "DEFINITIONS - TECHNICAL" clause.
**!

(a) Labor Requirements. Engineered Performance Standards (EPS) shall be the primary source for determining the number of performance standard hours required to complete the scope of work. EPS does not cover every task that might be accomplished by specific crafts. For tasks which are not exactly identified in EPS manuals, work content comparison will be performed prior to making a determination that EPS does not apply. When a work task cannot be found either directly in EPS or by using EPS work content comparison procedures, the number of performance standard hours required shall be determined based on the following commercial work performance standards in the sequence indicated: *Means Repair & Remodeling Cost Data*, !INSERT OTHER APPLICABLE STANDARDS AS REQUIRED!. Labor hours shall not be included in the scope of work as mark-ups or add-ons for travel [travel zone 0 ("shop") shall be used when applying the EPS nomograph], work time associated with union agreements, overhead, profit, material markups, supervision, or clerical support. These items shall be included in the labor hour unit prices and fixed burden rates bid by the Contractor.

(b) Material Requirements. Projected material requirements will include a list of materials establishing the size, quality, and number of units. Pre-expended bin supplies and materials will not be included in the list of materials since the cost for these items were included in the labor hour unit prices bid.

(c) Construction and Weight Handling Equipment Requirements. Requirements for construction and weight handling equipment will include identification of the type, size, capacities, and number of units; and whether or not Government-furnished equipment and/or operators will be made available.

(3) Contractor's Review of Proposed Work Scopes. The Contractor shall review proposed work scopes and provide: (1) proposed unit prices for the materials and equipment specified in the scope of work, (2) proposed number of standard hours required to complete the specified scope of work which are not covered by EPS or other specified work performance standards, (3) a description of any additional materials, equipment, or task descriptions that are necessary to satisfactorily accomplish the overall work scope for the particular craft phases, and (4) a list of any discrepancies in the material, equipment, and task

descriptions listed in the Government's proposed scope of work. Descriptions of proposed additional materials, equipment, or task descriptions shall be prepared in accordance with the "Preparation of Work Scopes" paragraph, including appropriate performance standard task references and the total estimated number of performance standard hours. Reviewed work scopes shall be returned to the Contracting Officer within !INSERT NUMBER! calendar days after receipt for proposed urgent delivery orders, and within !INSERT NUMBER! calendar days after receipt of proposed routine delivery orders.

(4) Establishing Final Delivery Order Cost. Once a bilateral agreement is reached, the final cost will be a firm fixed-price delivery order for the work described.

(a) Establishing Total Labor Costs. The total labor cost will be determined by totaling the number of performance standard labor hours for each craft (trade) and then multiplying by the appropriate labor hour unit price from the Schedule of Indefinite Quantity Work - Unit Priced Labor in Section B. This procedure will be followed for each craft required to perform the job. The total for all crafts is the total labor cost.

(b) Establishing Total Material Costs. Material prices provided by the Contractor shall be the lowest price available considering the availability of materials and the time constraints of the job. The direct material price shall be reduced by all discounts and rebates for core value or salvage value that accrue to the Contractor. The total direct material cost for the job will be multiplied by the Contractor's fixed burden rate from the "MATERIAL TO SUPPORT UNIT PRICED LABOR" contract line item, Section B, to determine the total burdened material cost for the job.

(c) Establishing Total Equipment Costs

1 Rental equipment shall be based on the lowest price available considering availability and time constraints of the job.

2 When the equipment to be used is owned by the Contractor, the price proposed shall be based on the U. S. Army Corps of Engineers Construction Equipment Ownership and Operating Expense Schedule EP 1110-1-8.

3 Cost for equipment operators, when separate operators are required, shall be based on an EPS standard labor hour basis, unless operator cost is included in equipment rental price or operator has been provided by the Government. Any overhead expense associated with equipment usage shall be included in the Contractor's bid for the applicable labor hour unit price.

!**********
NOTE TO SPECIFICATION WRITER: The urgent and routine classifications allow for different completion times for unit priced labor. The user should modify these requirements as needed.
**********!

(5) Completion Requirements. The Contracting Officer will order unit priced labor by issuing to the Contractor a copy of the approved scope of work and a delivery order for the work described, in accordance with the "PROCEDURES FOR ISSUING ORDERS" clause in Section G.

(a) Urgent Work. Historically the Government has classified up to !INSERT PERCENTAGE!% of the delivery orders for unit priced labor as urgent. The Contractor shall complete all urgent delivery orders within !INSERT NUMBER! calendar days of receipt. Urgent work shall normally be performed only during regular working hours, except that after hours and/or weekend work may be authorized by the Contracting Officer if required to complete work within the time requirement specified above.

(b) Routine Work. All non-urgent work will be classified as routine work. Routine work will be further classified by the Government as one of two different "Types". Delivery orders for routine work shall be completed within the number of calendar days after receipt specified in the table below. No more than !INSERT PERCENTAGE!% of the delivery orders for routine work will be classified as Type I.

Classification	Completion Time
Type I	!INSERT NUMBER! calendar days
Type II	!INSERT NUMBER! calendar days

(6) Engineered Performance Standards

(a) EPS Handbooks. EPS handbooks will be made available for examination at !INSERT LOCATION AT THE ACTIVITY WHERE THE WORK WILL BE PERFORMED AND THE CONTRACTS OFFICE AT WHICH THE BIDS WILL BE RECEIVED! and at Naval Facilities Engineering Command Engineering Field Divisions during the bidding period of this contract. !INSERT NUMBER! copies of the EPS handbooks will be provided to the Contractor after award.

(b) Travel Zone Maps. The Travel Zone map for !INSERT ACTIVITY! is provided as Attachment J-C8 and is to be used in conjunction with the historical data in Attachment J-C7 to evaluate travel time impact.

!**********
NOTE TO SPECIFICATION WRITER: Include this optional clause only if unit priced labor is not to be included in the contract.
**********!

C.10(OPTIONAL) GENERAL REQUIREMENTS AND PROCEDURES FOR INDEFINITE QUANTITY WORK. The indefinite quantity items listed in the Schedule of Indefinite Quantity Work, Section B, will be ordered by the Contracting Officer on a delivery order, DD Form 1155, in accordance with the "PROCEDURES FOR ISSUING ORDERS" clause, Section G. The unit prices bid include all labor, material, and equipment necessary to perform the specified task.

!**********
NOTE TO SPECIFICATION WRITER: The NAVFAC Uniform Contract Format Guide (UCFG) specifies a number of additional clauses which may be included in Section C, including the following:

PERFORMANCE EVALUATION MEETINGS	INSURANCE
WORK SCHEDULE	TECHNICAL LIBRARY
DIRECTIVES	STATION REGULATIONS
FIRE PROTECTION	ENVIRONMENTAL PROTECTION
DISPOSAL	SAFETY REQUIREMENTS AND REPORTS
SECURITY REQUIREMENTS	PASSES AND BADGES

ACCESS TO BUILDINGS
CONTRACTOR EMPLOYEES
IDENTIFICATION OF CONTRACTOR EMPLOYEES
IDENTIFICATION OF CONTRACTOR VEHICLES
PERMITS

Since these clauses are subject to change and are readily available in the UCFG, they have not been included in this GPWS.
**********!

END OF SECTION C

EXAMPLE ANNEX

ANNEX 1, SECTION C
MAINTENANCE OF BUILDINGS AND STRUCTURES (OTHER THAN FAMILY HOUSING)

!**********
NOTE TO SPECIFICATION WRITER. This annex illustrates how individual GPWSs may be used to specify technical requirements for specific functional areas. In this case, technical requirements unique to the maintenance of buildings and structures were extracted from the GPWS for Maintenance of Buildings and Structures (Other than Family Housing). Note that all of the annex contract requirements fall under the three main types of work which have already been defined in the basic Section C, service call work, recurring work, and indefinite quantity work. Add a separate annex to define specific services for each of the functional areas included in the contract.
**********!

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ANNEX 1, SECTION C

MAINTENANCE OF BUILDINGS AND STRUCTURES (OTHER THAN FAMILY HOUSING)

C1.1 GENERAL REQUIREMENTS. Attachment J-C1-1 describes the buildings and structures to be maintained in this contract. The work includes the performance of service call work, recurring work, and indefinite quantity work.

!**********
NOTE TO SPECIFICATION WRITER: A "DEFINITIONS - TECHNICAL" clause should be included in each annex that contains unique functional terms that were not included previously in Section C or in another annex.
**********!

C1.2 DEFINITIONS - TECHNICAL. As used throughout this contract, the following terms shall have the meanings set forth below.

!INSERT DEFINITIONS AS NEEDED OR DELETE CLAUSE!

C1.3 RECURRING WORK REQUIREMENTS. Recurring work in this annex includes preventive maintenance and relamping services.

a. Preventive Maintenance. The Contractor shall perform preventive maintenance (PM) inspections on the equipment and systems listed in Attachment J-C1-1 in accordance with the procedures specified in clause C.9.b and Attachment J-C1-2.

b. Relamping. The Contractor shall provide relamping services for all buildings listed in Attachment J-C1-3, including emergency, exit, and exterior lights attached to buildings. The work shall include inspecting each building in accordance with the schedule in Attachment J-C1-3, and replacing all blackened, discolored, blinking, and burned out fluorescent tubes and incandescent bulbs; and other defective parts such as, ballasts, starters, etc. In areas where the fixtures are not easily accessible, such as high bay or hangar areas, the Contractor may elect to perform group relamping. Replacement lamps and components shall be the same type, wattage, and voltage as those removed. Between scheduled relamping services the Contractor shall respond to service calls in accordance with clause C.8, for replacing light bulbs, tubes, and other defective parts.

C1.4 GENERAL REQUIREMENTS FOR CARPENTRY AND MASONRY. Carpentry and masonry maintenance, repair, and alteration services shall be provided in accordance with the definitions, procedures, and standards specified in this section and NAVFAC Manual MO-111, *Building Maintenance - Structures*, and NAVFAC Manual MO-113, *Facilities Engineering Maintenance and Repair of Roofs*.

a. General Interior Work

(1) Floors and Floor Coverings. Damaged or deteriorated flooring, subflooring, and structural members shall be repaired or replaced to provide a structurally sound, uniform, and aesthetic surface which is free of cracks, breaks, chips, tears, gouges, stains, and buckling. The bid prices for indefinite quantity unit priced tasks for flooring replacement shall include all costs for removal and disposal; subfloor surface preparation; and installation and finishing of flooring and baseboard and/or shoe molding.

(a) Resilient Tiles. Damaged or deteriorated tiles shall be replaced with matching tiles of the same thickness as original. Damaged tiles or tiles to be replaced shall be removed without affecting adjacent tiles. If tile is replaced adjacent to a wall, vinyl baseboard shall be replaced at no additional cost. If the tile in an entire room is replaced, all vinyl baseboard in that room shall be replaced at no additional cost. Installation shall be in accordance with manufacturer's instructions.

(b) Linoleum and Vinyl Sheet Flooring. Areas of flooring having gashes or other defects shall be replaced with matching sheet flooring of the same thickness as the original. Damaged flooring to be replaced shall be removed without affecting adjacent areas. The patch shall be installed using adhesive as recommended by the flooring manufacturer. If flooring is replaced adjacent to a wall, vinyl baseboard shall be replaced at no additional cost.

!ETC!

!ADD ADDITIONAL SPECIFIC REQUIREMENTS FOR CARPENTRY AND MASONRY AS NEEDED!

C1.5 GENERAL REQUIREMENTS FOR PAINTING. Painting shall include both the interior and exterior of all types of surfaces on buildings and miscellaneous structures, as well as the painting of other miscellaneous items such as signs, guard posts and rails, parking bumpers, etc. Interior and exterior painting performed in conjunction with service work, recurring work, and other fixed-price services is considered incidental to and part of the job, and shall be provided at no additional cost to the Government. Painting shall be ordered from the indefinite quantity portion of the contract only if the scope of the work is beyond the scope of touch-up painting, as defined below. The indefinite quantity unit prices bid shall include all costs for surface preparation, caulking, required spot priming, protection of items which are not to be painted; and other requirements as specified in this clause. All painting, whether interior or exterior, fixed-price or indefinite quantity, shall include all work necessary for a finished job including windows, door frames, trim, molding, closets, shelves, etc.

a. Certificates of Compliance. Certificates of compliance from the manufacturer shall be submitted for all paint types listed in the Paint Schedule below, in accordance with the requirements of the "CONTRACTOR FURNISHED ITEMS" clause, Section C.

b. Protection of Areas. All furnishings, equipment, floor coverings, and other surfaces which are not to be painted shall be carefully moved, covered, or otherwise protected prior to painting. Items such as hardware, hardware accessories, machined surfaces, blinds, curtains, plates, light fixtures, and similar items in contact with painted surfaces shall be removed, masked, or otherwise protected prior to surface preparation. After painting, the Contractor shall remove paint, both old and new paint, from surfaces not to be painted and restore to original condition. All removed items shall be repositioned and furnishings and other property returned to their original position. Painted items such as windows, doors, and cabinets shall operate smoothly without binding. The Contractor shall be responsible for the cost of repairing any damage caused to Government or personal property.

!ETC!

!ADD ADDITIONAL SPECIFIC REQUIREMENTS FOR PAINTING AS NEEDED!

C1.6 GENERAL REQUIREMENTS FOR PLUMBING

!ETC!

!ADD ADDITIONAL SPECIFIC REQUIREMENTS FOR PLUMBING AS NEEDED!

!**********
NOTE TO SPECIFICATION WRITER: Add additional clauses as needed to describe all technical requirements for maintenance of buildings and structures. Refer to the NAVFAC GPWS for Maintenance of Buildings and Structures (Other than Family Housing.
**********!

END OF ANNEX C1

EXAMPLE ANNEX

ANNEX 2, SECTION C
HVAC OPERATION, MAINTENANCE, AND REPAIR

!**********
NOTE TO SPECIFICATION WRITER. As with Annex 1, this sample annex illustrates how individual GPWSs may be used to specify technical requirements for specific functional areas. In Annex 2, technical requirements unique to the operation, maintenance, and repair of HVAC systems were extracted from the GPWS for Heating, Ventilating, and Air Conditioning; Refrigeration; and Compressed Air Systems; Operation, Maintenance, and Repair. Note that all of the annex contract requirements fall under the three main types of work which have already been defined in the basic Section C, service call work, recurring work, and indefinite quantity work. Add a separate annex to define specific services for each of the functional areas included in the contract.
**********!

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ANNEX 2 SECTION C
HVAC OPERATION, MAINTENANCE, AND REPAIR

C2.1 GENERAL REQUIREMENTS. Attachment J-C2-1 describes the HVAC systems to be maintained in this contract. The work includes the performance of service call work, recurring work, and indefinite quantity work.

!**********
NOTE TO SPECIFICATION WRITER: A DEFINITIONS - TECHNICAL clause should be included in each annex that contains unique functional terms that were not included previously in Section C or in another annex.
**********!

C2.2 DEFINITIONS - TECHNICAL. As used throughout this contract, the following terms shall have the meaning set forth below.

a. Check. Check includes examination and the performance of parts replacement, lubrication, adjustment, calibration, cleaning, repair, etc.

b. Inspect. Inspect includes examination and the performance of parts replacement, lubrication, adjustment, calibration, cleaning, repair, etc.

C2.3 PREVENTIVE MAINTENANCE. The Contractor shall perform preventive maintenance (PM) inspections on the HVAC equipment and systems listed in Attachment J-C2-1 in accordance with the procedures specified in this clause, clause C.9.b, and Attachment J-C2-3. The following general requirements are applicable to and amplify the specific PM inspection requirements contained in Attachment J-C2-3.

a. Regular Adjustment. Regular adjustments as may be required for efficient, economical, and safe performance of equipment systems shall be made at the time of each scheduled preventive maintenance.

b. Replacement and Cleaning of Air Filters. Cleaning of air filters shall include a check for dust, grease, and other deposits and for missing or improperly fitted filters. Replace throw-away type filters and those missing or having improper fit; wash permanent type filters in soap suds or solvents, rinse with hot water, and restore viscous coating in accordance with manufacturer’s instructions.

c. Motors, Drives, Sheaves, Shafts, Couplings, Blowers, Fans, Hubs, Belts, Bearings, Gearboxes, Guards. Check for accumulations of dust, dirt, grease, and oil. Clean, adjust, service, repair, or replace items as necessary to correct existing deficiencies such as: worn, loose, missing, or damaged parts, guards, connections, and connectors; bent blades; worn, loose, broken or missing belts; unbalanced moving parts; shaft misalignment; worn or damaged couplings; excessive noises and vibrations; end play of shafts; bad bearings; ineffective isolators; vibration absorbers; etc. Check full load and run load amps of each electric motor, other than fractional H.P. and compare with manufacturer’s data plate ratings. Check condition of motor windings and brushes.

d. Wiring, Electrical Control Circuits, Systems. Check for loose, charred, broken, or damaged wires and insulation; short circuits, loose or weak contact springs; worn or pitted contacts; proper sizing of fuses; defective operation of parts and components; and other deficiencies. All wire splice connections shall be properly insulated. All electrical wiring, circuits, etc., shall be in

accordance with the National Electrical Code for the particular application in which used. Clean, adjust, service, repair, or replace items found to be deficient.

e. Thermostats, Subbases, Guards, Covers, Ambientstats, Sub & Master Controllers, Sensors, Transmitters, Temperature & Pressure Controls, etc. Check for improper settings, defective operation, calibration and cleanliness, proper control voltages, and pneumatic air operating pressures. Check for deficiencies in wiring, tubing, piping, switches, relays, coils, solenoids, transformers, controls, sensors, thermostats and protective covers and guards, ambientstats, acquastats, pressure switches, reversing relays, timing devices, master and sub-master controllers, outdoor authority override controllers, etc. Clean, adjust, service, repair, or replace items found to be deficient.

f. Air Handler Units, Ducts, Plenums, Grilles, Registers, Diffusers, Screens, Dampers, Vanes, Mixing Boxes, VAV Boxes, Balancing of Air Systems. Check plenum chambers, supply and return air ducts, branch ducts, mixing boxes, VAV boxes, dampers, registers, grilles, diffusers, louvers, and insect and bird screens. Check for dirt, dust and trash; air leaks, broken, ripped or torn insulation and disconnected ducts; loose or broken connections, brackets, hangers, supports, and other parts; excessive vibrations or other movements; defects in metal, fiber glass, and other materials; proper operation of movable parts such as dampers, louvers, and vanes in relation to the controlling device; and inadequate air flow and/or distribution in main and branch duct circuits. Check air handler unit systems for proper operation and correct CFM air flow. Balance air distribution systems to original design specifications for all areas being serviced by the systems. Check air temperatures and static pressures. Check turning vanes, fire dampers, access openings, doors, panels, outside air make-up systems, ducts, and screens. Clean by sweeping, brushing, dusting, vacuuming, washing, hosing with water, detergents, degreasers, solvents, chemicals, air pressure, steam, or other methods as are applicable to the nature of the item being cleaned, and as may be required to obtain desired results. Clean, adjust, service, repair or replace all items found to be deficient.

g. Coils: Cooling/Heating, Condenser (Water and Refrigerant). Check for obstructions to air flow through all coils. Check for dust, dirt, and foreign materials accumulation, unusual noises and vibrations, and loose, missing or damaged parts. On direct expansion systems check for frosting or icing of coils; proper operation of expansion valves, capillary tubes and spider distributors; proper operation of automatic temperature controls and defrost timers; and check superheat across evaporator coils. Check all coils for leaks. On water cooling/heating coils check for proper water flow, temperature, and pressures across the coil. Clean and flush the water side of water cooling/heating coils (as applicable) as necessary to correct any deficiencies not allowing for proper operation. Check for damaged, bent or corroded coil fins on all coils. Clean, adjust, service, repair, or replace items found to be deficient.

h. Compressors. Check for dust, dirt, oil and grease deposits and accumulations, leakage of refrigerant and oil, cracked/clear sight glasses and gauges, damaged fittings, piping, valves, etc. Check for loose connections, excessive or unusual noise and vibrations; proper suction and discharge temperature and pressures, and indications of excessive heat. Check oil levels, unloaders for proper operation, and change out dirty/contaminated oil and filters. Check compressor full load and run load amps, compare against manufacturer’s data plate rating, and record the findings. Check all electrical

wiring and related components. Record the suction and discharge pressures and type and amount of refrigerant and/or oil added to the system, on the log sheet (as applicable) for air conditioning and compressed air plant compressors. Meg the motor windings on all compressor motors 15 H.P. and larger once each year and record the readings. Clean, adjust, service, repair, or replace all items found to be deficient.

i. Refrigerant & Oil Systems: Separators, Driers, Strainers, Filters, Oil Traps. Check for proper operation, refrigerant and oil leaks, and other material defects; check sight glass for clarity, cracks, or moisture. Check refrigerant and oil charges and levels. All systems with changeable core type filters/driers shall be changed as part of the regular PM inspection and service, or more often if required. Clean, adjust, service, repair, or replace all items found to be deficient.

!ETC!

!ADD ADDITIONAL SPECIFIC REQUIREMENTS FOR PM AS NEEDED!

C2.4 EQUIPMENT OPERATIONS. The Contractor shall operate those HVAC systems indicated in the "OPS CHECK" column of Attachment J-C2-1. Operations shall be conducted in accordance with applicable manufacturer's specifications, manuals, brochures, literature, directives, pamphlets, etc., except as may be directed by the Contracting Officer for reasons of emergencies, inclement weather, energy conservation, safety, etc. Operational checks shall be made daily not later than 9:00 A.M., at a minimum during all periods of equipment operation.

!**********
NOTE TO SPECIFICATION WRITER: As with PM inspections, the intent of operator maintenance is to identify and perform minor adjustments and repairs, not to perform major repair work. With this in mind, the dollar and time limits below should be established based on the size, complexity, and condition of the equipment to be operated.
**********!

a. Operator Maintenance. Operator maintenance shall be performed daily, or more frequently if required by the equipment manufacturer. Operator maintenance shall include the performance of any needed minor adjustments and repairs, provided that such repairs can be made within !INSERT NUMBER! estimated direct labor hours or less and the total direct material cost does not exceed $!INSERT DOLLAR VALUE!. Equipment deficiencies which are beyond the scope of operator maintenance shall be noted on Operational Log Sheets (See Attachment J-C5) and reported to the Government representative in writing not later than 9:00 A.M. the following work day.

b. Operation Log Sheets. Operation Log Sheets shall be filled out as part of each operational check. When systems are secured for extended periods for repair, seasonal shutdown, etc., a remark shall be included on the log sheet to that effect. Log sheets shall be subject to periodic inspection by the Government. Copies of all log sheets shall accompany the monthly payment invoice.

C2.5 SPECIFIC REQUIREMENTS FOR AIR CONDITIONING EQUIPMENT. Air conditioning systems to be operated, maintained, and repaired are listed in Attachment J-C2-1. These systems vary in size from !INSERT NUMBER! tons to !INSERT NUMBER! tons. Maintenance, repair, and operation of these systems shall be performed in

accordance with the recommendations of the manufacturer and the provisions of this contract, including the following:

!**
NOTE TO SPECIFICATION WRITER: The start-up/shut-down requirements specified below are very general. It is **IMPORTANT** for the user to add detailed, specific requirements, such as manufacturers' recommended actions, either to this clause or to an attachment in Section J.
**!

a. Seasonal Start-Up and Shut-Down

(1) The Contractor shall perform start-up/shut-down of those air conditioning systems listed in Attachment J-C2-4. The air conditioning systems listed are normally shut-down during the months of October or November, and started up during the months of April or May; however, the length of the season will vary and no adjustment in the contract price will be made regardless of the actual length of the season. The Contracting Officer will advise the Contractor of the specific date or dates when such services should begin to be accomplished. All work must be completed within !INSERT NUMBER! calendar days of the specified start date for equipment in individual buildings, or within !INSERT NUMBER! calendar days if services are ordered for all systems at the same time.

(2) During start-up, systems shall receive a thorough inspection to insure that all systems and components are operating as designed, as well as any specific checks and procedures which may be required by the manufacturer. Shut-down shall consist of system checks and preservation as required by the manufacturer, and an operational check to identify needed repairs that may be accomplished during the off season. Needed repairs which are within the scope of operator maintenance, as defined in paragraph C2.4.a, shall be accomplished by the Contractor as part of the start-up/shut-down. A report that work has been completed, including a list of needed repairs which are beyond the scope of Operator Maintenance, shall be provided to the Contracting Officer for each item of equipment within !INSERT NUMBER! working days after completion of the start-up or shut-down service.

b. Replacement of Burned Out Air Conditioning and Refrigeration Compressors. When compressors are replaced, the internal refrigeration system shall be thoroughly cleaned in accordance with Contracting Officer approved manufacturer's procedures. Additional precautions shall be taken in accordance with approved and acceptable industry standards and practice to further control refrigerant system contamination and prevent damage to replacement compressors and components. Clean-up methods should include, but are not limited to, the use of clean up kits, suction and discharge line filters/driers, moisture indicating sight glasses, acid testing kits, changing or adding of oil filters and system flushing, changing the oil, deep vacuuming of refrigerant system, leak checking, etc., all as may be appropriate for the particular system.

!ETC!

!ADD ADDITIONAL SPECIFIC REQUIREMENTS FOR AIR CONDITIONING EQUIPMENT AS NEEDED!

!**
NOTE TO SPECIFICATION WRITER: Add additional clauses as needed to describe all technical requirements for maintenance of HVAC systems. Refer to the NAVFAC

GPWS for Heating, Ventilating, and Air Conditioning; Refrigeration; and Compressed Air Systems; Operation, Maintenance, and Repair.
**********!

END OF ANNEX C2

PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

SECTION J: LIST OF ATTACHMENTS

!**********
NOTE TO SPECIFICATION WRITER: The numbering system used below is designed so that the number of the Attachment refers back to the contract section and annex (if any) that it supports. For example:

J-C1	denotes Attachment 1 to basic Section C
J-C1-1	denotes Attachment 1 relating to Annex 1
J-C1-2	denotes Attachment 2 relating to Annex 1
J-C2-1	denotes Attachment 1 relating to Annex 2
J-E2	denotes Attachment 2 to basic Section E

!ETC!

The Attachments marked "*" in the TABLE OF CONTENTS below do **NOT** have examples included in this GPWS. However, examples of these and other Attachments may be found in each of the functional area NAVFAC GPWSs. The TABLE OF CONTENTS below and sample Attachments provided in this GPWS are for illustration only.
**********!

TABLE OF CONTENTS

ATTACHMENT J-1

DEPARTMENT OF LABOR WAGE DETERMINATION(S)

!**********
NOTE TO SPECIFICATION WRITER: Choose one of the following.
**********!

Attached is Davis-Bacon Act Wage Determination !INSERT NUMBER! and Service Contract Act Wage Determination !INSERT NUMBER!. These determinations specify the minimum wages and fringe benefits to be paid under this contract.

OR

Attached is Davis-Bacon Act Wage Determination !INSERT NUMBER!. A Service Contract Act Wage Determination has been requested from the Department of Labor and will be incorporated by amendment upon receipt. These determinations specify the minimum wages and fringe benefits to be paid under this contract.

OR

Attached is Service Contract Act Wage Determination !INSERT NUMBER!. This determination specifies the minimum wages and fringe benefits to be paid under this contract.

ATTACHMENT J-C1

GOVERNMENT-FURNISHED FACILITIES

!**********
NOTE TO SPECIFICATION WRITER: List all facilities that are to be provided to the Contractor. Provide descriptive characteristics and provide simple drawings of each facility showing Contractor areas, areas retained for use by the Government, etc.
**********!

The following facilities will be made available for use by the Contractor, as specified in the "GOVERNMENT-FURNISHED PROPERTY AND SERVICES" clause, Section C.

BUILDING NUMBER/LOCATION	SQUARE FEET	DESCRIPTION	
5/Naval Station	5000	Office Space (2)	600 SF
		Lounge Area (1)	350 SF
		Rest Rooms (2)	400 SF
		Hallways, Stairs, etc.	150 SF
		Maintenance Shops	3500 SF
		TOTAL =	5000 SF
114/Naval Station	2000	Storage (3)	600 SF
		Rest Rooms (2)	200 SF
		Office Space (3)	1200 SF
		TOTAL =	2000 SF
6/Naval Station	9000	General Bay	4600 SF
		Wash Down Area	2100 SF
		General Storage	250 SF
		Tool Room	300 SF
		Battery Room	150 SF
		Office	200 SF
		Restrooms (2)	200 SF
		Open Ramp Area	1200 SF
		TOTAL =	9000 SF
212/Naval Station	250	Flammable Storage Locker	
65/Naval Station Annex	19000	Material Storage Warehouse	
North of 5/Naval Station	20000	Equipment Storage Area	

!ETC!

ATTACHMENT J-C2

GOVERNMENT-FURNISHED EQUIPMENT

!**********!

NOTE TO SPECIFICATION WRITER: List all equipment that will be provided to the Contractor. Provide descriptive characteristics including manufacturer, model type, age, location, etc, if appropriate.

**********!

The following items of equipment will be made available for use by the Contractor, as specified in the "GOVERNMENT-FURNISHED PROPERTY AND SERVICES" clause, Section C.

SHOP/OFFICE EQUIPMENT

QUANTITY	DESCRIPTION	LOCATION
2 EA	Work Bench	Bldg 5
5 EA	Work Bench, wood	Bldg 5
1 EA	Air lift, Dover	Bldg 5
1 EA	Dresser Air Compressor	Bldg 5
1 EA	Coats Tire Machine, Air	Bldg 5
1 EA	Dover Air Lift	Bldg 5
1 EA	Ingersol Rand 10T-T3015TM, 002955 Air Compressor	Fuel Facility
1 EA	Quincy Air Compressor	Bldg 16
1 EA	Peerless Air Compressor	Bldg 5
1 EA	Hammond Grinder Floor Model	Bldg 5
1 EA	Hertner Charger Electric Forklift	Bldg 5
10 EA	Wall Locker	Bldg 5
1 EA	Wood Stand Up Desk	Bldg 5
1 EA	Bolt Bin Rotary Type	Bldg 5
1 EA	Bolt Bin	Bldg 5
1 EA	Drinking Fountain, Oasis	Bldg 16
6 EA	Window A/C Unit	Bldg 16
1 EA	Coat Rack	Bldg 16
3 EA	Metal Book Shelf	Bldg 16
1 EA	3’ x 8’ Table	Bldg 16
1 EA	2½' x 4' Table	Bldg 16
1 EA	8-Shelf Parts Bin	Bldg 5
1 EA	Key Machine	Bldg 16
35 EA	8-Shelf Parts Bin	Bldg 5
2 EA	Credenza	Bldg 16
6 EA	Metal Desk	Bldg 16
8 EA	Chair	Bldg 16

!ETC!

CIVIL ENGINEERING SUPPORT/MATERIAL HANDLING EQUIPMENT

Some items of equipment will be replaced by the Government, as indicated below, when they are worn beyond economical repair due to normal wear and tear. Replacements are subject to availability, and the non-availability of a replacement item shall not relieve the Contractor of responsibility to fully perform the requirements of the contract.

USN NUMBER	DESCRIPTION	MANUFACTURER	YEAR	ACCUMULATED MILES/HOURS	GOVERNMENT FURNISHED REPLACEMENT
94-12037	½-Ton Pickup Truck	Ford	81	000937	No
94-16291	½-Ton Pickup Truck	Chevrolet	74	076356	No
94-16292	½-Ton Pickup Truck	Dodge	70	074704	No
94-16293	½-Ton Pickup Truck	Ford	70	099722	No
94-16294	½-Ton Truck, 4x4	Chevrolet	71	090049	No
45-23684	Tracked Front End Loader	Case	88	000542	Yes

!ETC!

ATTACHMENT J-C3

GOVERNMENT-FURNISHED MATERIAL

!**********
NOTE TO SPECIFICATION WRITER: List all materials that are to be provided to the Contractor. Provide descriptive characteristics including generic name, federal or commercial specifications (if applicable), and quantities of issue. Indicate how it is to be provided to the Contractor, does he/she pick it up (where and when) or will the Government deliver it?
**********!

The following material will be made available for use by the Contractor, as specified in the "GOVERNMENT FURNISHED-PROPERTY AND SERVICES" clause, Section C.

PART A - ONE TIME ISSUE

DESCRIPTION	QUANTITY

PART B - INSURANCE ITEMS

DESCRIPTION	MINIMUM QUANTITY

ATTACHMENT J-C4

CONTRACTOR FURNISHED MATERIAL AND EQUIPMENT

!**
NOTE TO SPECIFICATION WRITER: This attachment identifies the specific type and quality of materials and equipment that the Contractor is responsible for providing. Quality standards may be specified using Federal or other standards and specifications. These standards and specifications are available from NAVFAC EFDs (Code 04), the Construction Criteria Base (CCB), and other technical information systems. The following list is an **EXAMPLE** of the types of information that should be displayed in this attachment. Make sure that standards and specifications are still in effect and latest editions are specified. Add or delete items as required.
**!

1. Materials provided by the Contractor shall comply with the following standards and specifications, as specified in the "CONTRACTOR FURNISHED ITEMS" paragraph, Section C.

a. Commercial Item Description (CID)

A-A-341A	Pigment, Aluminum, Powder and Paste
A-A-1419D	Filter Element, Air Conditioning (Viscous-Impingement and Dry Types, Replaceable)
A-A-1558	Paint, Stencil
A-A-1926	Closure, Door
A-A-2559	Dishwashing Machine, Household (Electric)

!ETC!

b. Federal Specifications

AA-R-00211H	Refrigerators, Mechanical, Household (Electrical, Self-Contained)
FF-H-106C/GEN	Hardware, Builders; Locks and Door Trim: General Specification for
L-F-475A & Am 3	Floor Covering Vinyl, Surface (Tile and Roll), with Backing
MMM-A-110B, Notice 1	Adhesive, Asphalt, Cut-Back Type (for Asphalt and Vinyl-Asbestos Tiles)
OO-G-1513B	Garbage Disposers, Household

!ETC!

c. Federal Standards (Fed. Std.)

Fed-Std-595B	Colors Used in Government Procurement

!ETC!

d. Military Specifications

MIL-F-16081G	Fans, Ventilating, Propeller
MIL-P-24441B(1)	Paint, Epoxy-Polyamide, General Specification for
MIL-P-28577B	Primer, Water-Borne, Acrylic or Modified Acrylic, for Metal Surfaces
MIL-P-28578B	Paint, Water-Borne, Acrylic or Modified Acrylic, Semigloss, for Metal Surfaces

!ETC!

e. Other Standards

ARI 520-85	Positive Displacement Refrigerant Compressors, Compressor Units, and Condensing Units, Standard for
ASTM C564-88(1)	Rubber Gaskets for Cast Iron Soil Pipe and Fittings, Standard Specification for
ASTM C669-75(89)(1)	Glazing Compounds for Back Bedding and Face Glazing of Metal Sash, Standard Specification for
UL 514A-91	Metallic Outlet Boxes, Standards for

!ETC!

2. Submittals shall be provided for the following items, as specified in the "CONTRACTOR FURNISHED ITEMS" clause, Section C.

CERTIFICATES OF COMPLIANCE	MANUFACTURER'S DESCRIPTIONS	PRODUCT SAMPLES
Paints, all types, listed in Clause C1.5	Sealants and caulkings	Resilient floor tile
Sealants and caulkings	Floor tile adhesive	Vinyl sheet flooring
Smoke detectors	Garbage disposals	Venetian blinds
Floor tile adhesive	Range hoods	
Vinyl wall base	Water heaters	
Resilient floor tile	Ceiling fans	
Vinyl sheet flooring	Refrigerators	
	Ranges (electric and gas)	

!ETC!

ATTACHMENT J-C5

LIST OF REQUIRED RECORDS AND REPORTS

!**********
NOTE TO SPECIFICATION WRITER: The format, frequency, and specific data to be recorded and reported by the Contractor should be tailored by the user in order to obtain reports and information required by regulations and higher authority, and to enable the activity to periodically monitor the Contractor's operations. Keep in mind that numerous reports and high frequency requirements cost more money. Reports should be minimized and formats designed to consolidate and provide the necessary information with minimal effort. Attach sample forms, report formats, etc., so that the Contractor can get an accurate picture of the effort required in preparation.
**********!

The following records and reports shall be prepared, maintained, and submitted by the Contractor as specified in the "MANAGEMENT" clause, Section C.

RECORDS

SPECIFICATION REFERENCE	RECORD TITLE	WHEN SUBMITTED	EXAMPLE ATTACHED
a. C.6.d	History Files	Contract Completion	No
b. C.9.b(4)	Preventive Maintenance Inspection Record	Contract Completion	Yes
c. C2.4.b	Operation Log Sheets	Monthly with Invoice	No

!ETC!

REPORTS

SPECIFICATION REFERENCE	REPORT TITLE	WHEN SUBMITTED	EXAMPLE ATTACHED
a. C.6.d	Cost Accounting	Monthly with Invoice	No
b. C.9.b(3)	Preventive Maintenance Completion Report	Weekly	No
c. C2.5.a(2)	Start-Up/Shut-Down Deficiency Report	Within !INSERT! Working Days After Completion of Start-Up/Shut-Down	No

!ETC!

ATTACHMENT J-C6

EMERGENCY/SERVICE WORK AUTHORIZATION FORM

!**********!

NOTE TO SPECIFICATION WRITER: Include an Emergency/Service Work Authorization Form, NAVFAC 11014/21 (Rev. 6-75) or other user generated service call work authorization form.

**********!

ATTACHMENT J-C7

HISTORICAL/PROJECTED WORKLOAD DATA

!**
NOTE TO SPECIFICATION WRITER: This attachment includes sample formats for displaying historical/projected workload data. **ACCURATE** and complete data is essential in the development of realistic Contractor bids. If complete historical information is not available, projections should be made based on the data that is available, and some system established to capture required historical information for future contracts. If a CA program study is being conducted, data should be based on estimated versus actual hours so that the Government's most efficient organization will not be compromised.
**!

The data in this attachment is taken from the activity's records for the functions to be maintained under this contract. It is not considered sufficiently accurate for bidding purposes by itself, but is included to indicate the types, approximate order of magnitude, and seasonal trends in the workload.

!**
NOTE TO SPECIFICATION WRITER: When determining the number of calls of each classification be sure to consider the tailored service call and classification definitions in clause C.8, especially if definitions have been changed from previous contracts.
**!

1. SERVICE CALL WORK

NUMBER OF SERVICE CALLS PER MONTH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Emergency												
1991	28	27	21	18	21	17	20	20	19	18	25	19
1992	35	23	18	22	20	21	22	21	11	21	31	21
Urgent												
1991	398	360	318	421	429	536	522	497	343	382	301	318
1992	419	372	296	381	417	555	543	515	360	421	272	276
Routine												
1991	972	1046	987	978	1011	1089	1112	1098	1127	1007	998	972
1992	998	1011	972	977	1064	1139	1136	1142	1185	1066	967	956
TOTALS:												
1991	1398	1433	1326	1417	1461	1642	1654	1615	1489	1407	1324	1309
1992	1452	1406	1286	1380	1501	1715	1701	1678	1556	1508	1270	1253

TRADE MIX

The various trades listed below were used in performing the service calls shown in the previous chart. The percentages of the total number of service calls shown in which each trade was involved are also shown below. For example, electricians were involved in approximately 12% of the calls shown above. Some calls involved more than one trade.

TRADE/CRAFT	TRADE INVOLVEMENT
Electrical	12%
Plumbing/Pipefitting	18%
Carpenter	26%
Labor	19%
Grounds	3%

!ETC!

DAVIS-BACON SERVICE CALLS

Approximate percentage of service calls subject to Davis-Bacon wage rates during the specified years:

1991	1992
8%	9%

PERCENTAGE OF CALLS RECEIVED AFTER REGULAR HOURS

Approximate percentage of service calls received after regular working hours and on weekends/holidays during the specified years:

	1991	1992
Emergency	29%	27%
Urgent	27%	23%
Routine	7%	8%

ACTUAL HOURS REQUIRED FOR COMPLETION

Actual hours required for completion of service calls during the specified years. This must not be confused with the EPS **ESTIMATED** hours required for completion, as discussed in the "GENERAL REQUIREMENTS AND PROCEDURES FOR SERVICE CALL WORK" clause, Section C.

	1991	1992
0 - 4 Hours	75%	74%
4 - 8 Hours	15%	16%
8 - 16 Hours	9%	9%
Over 16 Hours	1%	1%

2. INDEFINITE QUANTITY WORK UNIT PRICED LABOR

NUMBER OF JOBS BY CRAFT

The number of jobs by craft using unit priced labor during the specified years.

TRADES	NUMBER OF JOBS [1] 1991	1992
Composite Skilled Trade	48	57
Unskilled Laborer	64	76
Painter	27	31
Equipment Operator	16	19

!ETC!

[1] Craft involvement only. Not total jobs.

NUMBER OF JOBS AND LABOR HOURS BY TRAVEL ZONES

TRAVEL ZONE	1	2	3	4	5	6	7	TOTAL
No. of jobs performed								
1991	30	110	130	60	35	25	10	400
1992	38	129	122	89	23	32	7	440
Total unit priced labor hours/zone								
1991	1350	5150	6050	2900	1785	1125	450	18810
1992	1710	6039	5678	4302	1172	1440	315	20656

NUMBER OF JOBS BY JOB SIZE

JOB SIZE (UNIT PRICE LABOR HOURS)	(17-31)	(32-80)	(81-120)	(121-160)	TOTAL
1991 (Number of jobs)					
1992 (Number of jobs)					

ATTACHMENT J-C8

ACTIVITY TRAVEL ZONE MAP

!**********

NOTE TO SPECIFICATION WRITER: Attach a legible copy of the activity's EPS travel zone map.

**********!

ATTACHMENT J-C1-1

DESCRIPTION OF BUILDINGS AND STRUCTURES

!**********
NOTE TO SPECIFICATION WRITER: Using the activity's property records, list and describe all buildings and miscellaneous structures (facilities) that will be maintained under the contract. Be sure to include miscellaneous structures such as bus stops, bleachers, monuments, etc. Include drawing numbers of applicable drawings, etc., to identify the facilities.
**********!

The following facilities shall be maintained under this contract:

FACILITY NUMBER	FACILITY NAME	YEAR BUILT	SQUARE FEET	TYPE STRUCTURE	DRAWING NUMBERS
100	Headquarters Bldg	1952	8000	Wood Frame	5134050-5134056
101	Galley	1953	15000	Wood Frame	5134078-5134086
102	Admin Offices	1953	10000	Wood Frame	5134100-5134130
103	Commissary	1980	25000	Conc Block	5134200-5134260
104	Sentry Shelter	1985	120	Wood Frame	-
105	Flagpole	1980	N/A	Steel	-
106	Warehouse	1953	50000	Wood Frame	5134060-5134085

!ETC!

ATTACHMENT J-C1-2

PREVENTIVE MAINTENANCE REQUIREMENTS

!**********!

NOTE TO SPECIFICATION WRITER: List the systems and equipment which require preventive maintenance (PM), including the frequency and PM standards that apply to these systems and equipment. Sample PM standards for selected items of equipment, as well as one way to format the required information, are shown below.

**********!

The Contractor shall perform preventive maintenance inspections on the following facility systems and equipment, as specified in clause C1.3.a and this attachment.

FACILITY NUMBER	SYSTEMS/EQUIPMENT	QUANTITY	FREQUENCY	PM STANDARD
100	Exhaust Fans	2	A	1
	Electric Roll-Up Doors	2	SA	2
	Drinking Fountains	4	SA	3
	Water Heater, Gas	1	SA	4

!ETC!

EQUIPMENT DESCRIPTION: EXHAUST FANS			STANDARD NO. 1 (SHEET 1 of 2)	
CHECK POINT NO.	CHECK POINT DESCRIPTION	EPS CRAFT HOURS	OCCUR	TOTAL
1	Open and close roof mounted fan housing. Stop and start fan with local switch.	.013		
2	Stop and start wall mounted fan with remote switch or circuit breaker	.009		
3	Remove or install access panel, bolted or screwed on.	.118		
4	Remove and install fan guard, bolted or screwed on.	.273		
5	Remove and install fan shutter (non-motorized).	.275		
6	Check motor bearings and windings for overheating.	.007		
7	Check fan shaft bearings for overheating.	.005		
8	Clean roof mounted ventilator components.	.110		
9	Clean wall mounted fan components.	.282		
10	Check "V" belt for tension and alignment; change belt, if worn out.	.108		
11	Lubricate fan motor bearing oil hole/bail cover - 2 each.	.018		
12	Lubricate fan shaft bearings.	.022		
13	Lubricate shutter (non-motorized).	.040		
14	Perform mechanical inspection for roof mounted fan.	.085		
15	Perform mechanical inspection for wall mounted fan.	.086		
16	Perform electrical inspection of roof mounted or wall mounted fan.	.026		
!ETC!	!ETC!	!ETC!		

ATTACHMENT J-C2-1

INVENTORY OF HVAC EQUIPMENT AND SYSTEMS

!**
NOTE TO SPECIFICATION WRITER: List and describe each of the HVAC systems that will be maintained under the contract.
**!

This attachment includes a list and description of the equipment and systems to be maintained, repaired, and operated, as specified in Annex 2, Section C.

BUILDING NUMBER	EQUIPMENT DESCRIPTION	TONNAGE/ H.P.	QTY	MODEL NO.	MANUFACTURER	PM NUMBER	OPS CHECK
102	Air conditioning split/ central system, complete	20 Ton	1	2FSD68	Trane	4	No
128	Chiller, water (reciprocating) system, complete	90 Ton	1	VRB0803B	Bohn	2	Yes
138	Chiller, water (centrifugal) system, complete	163 Ton	1	HTB2	York	1	Yes
307	Air handler	20 H.P.	1	CL602513	York	14	No
417	Chiller, water (screw machine) system, complete	150 Ton	1	PSC-150-0	Dunham-Bush	1	Yes
526	Portable chiller (centrifugal) system	100 Ton	1	HTB1	York	1	Yes
532	Heat pump	5 Ton	1	APCOTS	Carrier	15	No
612	Heat pump (window unit)	2 Ton	3	5KH35N2 5KU47N2 5GH3lN2	General Electric	15	No
703	Ventilator	10 H.P.	1	P/N 365M	Penn	17	No
737	Chiller, water (absorption) system	225 Ton	1	ER83	York	18	Yes
810	Evaporative cooling system	25 Ton	1	FUR27N	Air Fan	20	No

!ETC!

ATTACHMENT J-C2-2

CRITICAL EQUIPMENT AND SYSTEMS

!**********!
NOTE TO SPECIFICATION WRITER: The purpose of this Attachment is to provide a list of HVAC equipment whose continued operation is very important. Such equipment could be providing climate control in spaces containing computer equipment or electronic controls, commissary meat lockers, etc. Ensure that only truly critical equipment is included in this list.
**********!

This attachment provides a listing of critical equipment and systems. Service calls on critical equipment will normally be classified as emergency calls, as specified in paragraph C.8.c.

BUILDING NUMBER	EQUIPMENT DESCRIPTION	FACILITY DESCRIPTION
128	Chilled Water System	Naval Dental Clinic
304	Packaged Air Conditioning System	SSC Computer Room
500	Chilled Water System	Naval Hospital
557	Chilled Water System	NTEC Computer Building
711	Heat Pump	Child Care Center
735	Chilled Water System	Classroom Building
871	Heat Pump	Chapel
942	Heat Pump	Nursery

!ETC!

ATTACHMENT J-C2-3

PREVENTIVE MAINTENANCE REQUIREMENTS

!**********
NOTE TO SPECIFICATION WRITER: In this attachment provide preventive maintenance checklists for the equipment and systems listed in Attachment J-C2-1. A generic checklist for centrifugal and screw machine water chiller systems is provided as an example.
**********!

The Contractor shall perform preventive maintenance inspections in accordance with the requirements of clause C2.3 and this attachment. The terms "check", "inspect", and similar terms used in this attachment include the performance of parts replacement, lubrication, adjustment, calibration, cleaning, repair, etc. as an integral part of the check or inspection, if warranted. The following checklists are included:

Checklist Number 1	Centrifugal and Screw Machine Water Chiller Systems
Checklist Number 2	Reciprocating Water Chiller Systems
Checklist Number 6	Low Pressure Compressed Air Systems
Checklist Number 14	Air Handling Systems
Checklist Number 18	Absorption Chiller Systems
Checklist Number 20	Evaporative Cooling Systems

!ETC!

CHECKLIST NUMBER 1
MINIMUM PREVENTIVE MAINTENANCE CHECKPOINTS AND FREQUENCIES FOR
CENTRIFUGAL AND SCREW MACHINE WATER CHILLER SYSTEMS

FREQUENCY	CHECKPOINT
Daily	Check all operating pressures and temperatures.
	Check all operating gauges, charts, recorders, etc.
	Check oil level in all oil reservoirs.
	Check and complete the log sheet with all pertinent entries.
	Check purge system for proper operation and drain water as required.
	Check oil recovery.
	Check system for proper refrigerant level.
	Check system for leaks in piping.
	Check for vibrations/unusual noises in bearings, motors, etc.
Monthly	Check control indicator lights for proper operation.
	Check condition of sight glasses.
	Check oil heaters for proper operation.
	Check all pump seals for leaks.
Semiannual	Check condenser high pressure cutout.
	Check refrigeration low temperature cutout.
	Check chill water low temperature cutout.
	Check oil pressure regulating valve.
	Check oil temperature control.

!ETC!

ATTACHMENT J-C3-1

SCHEDULED GROUNDS MAINTENANCE SERVICES

Grounds maintenance services shall be provided at the locations and frequencies specified below.

TASK	FREQUENCY
MAINTENANCE LEVEL I	
A. Grass Cutting per paragraph C3.7.a, all parcels	Weekly, 6 to 8 calendar day intervals (27 total cuttings), 1 April to 30 September
	Every 2 weeks, 12 to 16 calendar day intervals (8 total cuttings); October, November, February, and March
	Monthly, 28 to 32 calendar day intervals (2 total cuttings), December and January
B. Edging per paragraph C3.7.b, all parcels	Monthly, 28 to 32 calendar day intervals (7 total edgings), 1 April to 31 October
	One edging in January
C. Plant and Shrub Pruning per paragraph C3.7.c, all parcels	One pruning in April and one pruning in October
D. Cultivation and Mulching per paragraph C3.7.d	
Parcels 1 - 10 (140 plants/shrubs, 8 flower beds)	One service in April and one service in July
Parcels 11 - 20 (120 plants/shrubs, 14 flower beds)	One service in May and one service in August
E. Fertilization per paragraph C3.7.e, all parcels	Once between 1 April and 20 April
F. Trash Collection and Disposal per paragraph C3.7.f, Parcels 1 - 20	Between the 1st and 15th day of each calendar month (12 total collections)
MAINTENANCE LEVEL II	
A. Grass Cutting per paragraph C3.8.a, all parcels	Weekly, 6 to 8 calendar day intervals (27 total cuttings), 1 April to 30 September

TASK	FREQUENCY
	Twice each month, 13 to 15 calendar day intervals (6 total cuttings); October, November, and March
	Monthly, 28 to 32 calendar day intervals (3 total cuttings); December, January, and February
B. Edging per paragraph C3.8.b, all parcels	Once every 42 to 48 calendar days (4 total edgings), 1 April to 30 September
	One edging in January
C. Fertilization per paragraph C3.8.c, all parcels	Once between 21 April and 10 May
D. Trash Collection and Disposal per paragraph C3.8.d, Parcels 21 - 36	Between the 16th and 30th of each calendar month (12 total collections)

MAINTENANCE LEVEL III

A. Grass Cutting per Clause C3.9, all parcels	Monthly, 28 to 32 calendar day intervals (9 total cuttings), 1 March to 30 November

MAINTENANCE LEVEL IV

A. Vegetation Cutting per Clause C3.10, all parcels	Once in June and once in September (2 total cuttings)

ATTACHMENT J-C3-2

GROUNDS MAINTENANCE INVENTORY

!**********
NOTE TO SPECIFICATION WRITER: Two approaches may be used in providing grounds maintenance inventory information.

If **ACCURATE** inventory information is available the preferred approach is to include detailed listings by parcel, similar to the examples provided below, that include information on the principal use, maintenance level, and types and quantities of vegetation to be maintained. Drawings should **ALSO** be included to illustrate the relative location of parcels, major terrain features, parcel boundaries, common areas in family housing areas, access routes to airfield areas, etc.

An alternate approach for activities which do not have accurate and detailed inventory information is to include detailed drawings from which bidders may develop their own quantity estimates. Of course parcel boundaries would have to be clearly defined and enough other details provided, such as where edging is to be performed, where flower beds are located, etc., to make accurate estimating viable. Also, unit prices in the Schedule of Deductions would have to be based on a price per month rather than a price per unit.
**********!

The following data and the attached drawings provide information on the location and geographic boundaries of the land areas (parcels) to be maintained under the contract, and a summary of the types and quantities of vegetation which they contain.

MAINTENANCE LEVEL I

PARCEL NUMBER	PRINCIPLE USE	DRAWING NUMBER	GRASSED AREAS (ACRES)	EDGING (LF)	PLANTS/ SHRUBS * (EA)	FLOWER BEDS (SF)	HEDGES (LF)	TRASH COLLECTION (ACRES)
1	Admin Area	01231	2.6	950	24	2	25	2.6
2	Park	01231	10.4	185	87	12	125	15.2
3	Admin Area	01233	3.4	0	14	1	0	3.4

!ETC!

* The actual number of plants/shrubs per parcel may vary up to 15 percent above or below the quantity stated.

MAINTENANCE LEVEL II

PARCEL NUMBER	PRINCIPLE USE	DRAWING NUMBER	GRASSED AREAS (ACRES)	EDGING (LF)	TRASH COLLECTION (ACRES)
21	Recreation Area	01234	6.6	175	6.6
22	Ball Field	01235	8.0	0	8.2

!ETC!

MAINTENANCE LEVEL III

PARCEL NUMBER	PRINCIPLE USE	DRAWING NUMBER	GRASSED AREAS (ACRES)	NOTES
37	Magazine Area	01234	47.2	1
42	Airfield	01235	19.0	3
46	Perimeter Road	01236	7.0	2

!ETC!

NOTES:
1. Twenty-eight magazines in parcel 37, five magazines in parcel 38
2. Contains runway approach lighting system
3. Contact with control tower is required at all times during mowing operations

MAINTENANCE LEVEL IV

PARCEL NUMBER	PRINCIPLE USE	DRAWING NUMBER	AREAS (ACRES)
48	Railroad Right-of-Way	01234	2.3
51	Powerline Right-of-Way	01234	3.2
52	Railroad Right-of-Way	01235	1.1

!ETC!

ABBREVIATIONS:
EA - Each
LF - Linear Feet
SF - Square Feet

ATTACHMENT J-E1

LIST OF ENGINEERED PERFORMANCE STANDARDS HANDBOOKS

PUBLICATION NUMBER	HANDBOOK NAME
P-701.0	Planner-Estimator’s Deskguide
P-702.0	Carpentry
P-703.0	Electrical, Electronic
P-704.0	Heating, Cooling & Ventilating
P-705.0	Service
P-706.0	Janitorial and Custodial Services
P-707.0	Machine Shop, Machine Repairs
P-708.0	Masonry
P-709.0	Moving and Rigging
P-710.0	Paint
P-711.0	Pipefitting and Plumbing
P-712.0	Roads, Grounds, Pest Control, and Refuse Collection
P-713.0	Sheet Metal, Structural Iron and Welding
P-714.0	Trackage
P-715.0	Wharfbuilding
P-716.0	Unit Price Standards (UPS)
P-717.0	Preventive/Recurring Maintenance

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Washington, C 20402

ATTACHMENT J-E2

PERFORMANCE REQUIREMENTS SUMMARY TABLE

!**********
NOTE TO SPECIFICATION WRITER: A PRS table is included in this attachment as required by the NAVFAC P-68, *Contracting Manual*. The contract requirements included in this example are provided for illustration only. See paragraph III.E of the User's Guide for additional information.
****

The purpose of this attachment is to:

a. List the contract requirements and work requirements considered most critical to satisfactory contract performance (See PRS Column 1).

b. Summarize the standards of performance in the specification for each specified work requirement (See PRS Column 2).

c. Provide maximum allowable defect rates (MADRs) for each work requirement (See PRS Column 3). The MADR is the defect rate in a population of services which, when exceeded, indicates that the Contractor's quality control is unsatisfactory. The MADR does not represent a threshold for payment deductions. Deductions are taken for all defects (with appropriate credit for rework) regardless of whether the MADR was exceeded.

d. Specify the percentage (weight) of contract requirement attributable to each listed work requirement (See PRS Column 4).

!**********
NOTE TO SPECIFICATION WRITER: The percentages in the WEIGHT column are used in conjunction with the Schedule of Deductions to calculate payment deductions for partially performed work. Sample payment deduction calculations are shown in each of the sample quality assurance plans in the Quality Assurance Guide of this GPWS. The user should verify that the percentages shown are representative of the activity's requirements, and modify as required. The MADRs shown are suggested rates only.
**********!

PERFORMANCE REQUIREMENTS SUMMARY TABLE

WORK REQUIREMENTS (Column 1)	STANDARDS OF PERFORMANCE (Column 2)	MAX ALLOW DEFECT RATE (Column 3)	WEIGHT (Column 4)
1. CONTRACT REQUIREMENT: EMERGENCY SERVICE CALLS			
A. Respond to calls within required time period	At job site within !INSERT TIME! with proper tools and equipment [paragraph C.8.d(1)]	2%	35% Item 1, Schedule of Deductions
B. Complete work within required time period	Completed within requirements for urgent or routine call, if appropriate [paragraph C.8.d(1)]	2%	10% Item 1, Schedule of Deductions
C. Perform quality service call work*	Emergency condition arrested, repairs completed in conformance with quality standards, Section C	2%	45% Item 1, Schedule of Deductions
D. Proper procedures followed	Work authorization completed and returned within one working day, properly classified after regular hours [paragraphs C.8.b(2) and C.8.e]	2%	10% Item 1, Schedule of Deductions
2. CONTRACT REQUIREMENT: URGENT SERVICE CALLS			
A. Respond to calls within required time period	At job site within !INSERT TIME! (regular hours) or !INSERT TIME! (after hours) with proper tools/equipment [paragraph C.8.d(2)]	3%	20% Item 2, Schedule of Deductions
B. Complete work within required time period	Prosecuted to completion and completed within !INSERT TIME! [paragraph C.8.d(2)]	3%	10% Item 2, Schedule of Deductions
C. Perform quality service call work*	Repairs completed in conformance with quality standards, Section C	3%	60% Item 2, Schedule of Deductions
D. Proper procedures followed	Work authorization completed and returned within one working day, properly classified after regular hours [paragraphs C.8.b(2) and C.8.e]	3%	10% Item 2, Schedule of Deductions

WORK REQUIREMENTS (Column 1)	STANDARDS OF PERFORMANCE (Column 2)	MAX ALLOW DEFECT RATE (Column 3)	WEIGHT (Column 4)
3. CONTRACT REQUIREMENT: ROUTINE SERVICE CALLS			
A. Complete work within required time period	Work completed within !INSERT NUMBER! working days [paragraph C.8.d(3)]	5%	15% Item 3, Schedule of Deductions
B. Perform quality service call work*	Repairs completed in conformance with quality standards, Section C	5%	75% Item 3, Schedule of Deductions
C. Proper procedures followed	Work authorization completed and returned within one working day, properly classified after regular hours [paragraphs C.8.b(2) and C.8.e]	5%	10% Item 3, Schedule of Deductions
4. CONTRACT REQUIREMENT: PREVENTIVE MAINTENANCE (PM)			
A. Complete work within required time period	Work completed by date specified in approved PM Schedule (paragraph C.9.b)	5%	15% Items 4.a, 5.a, and 8.a; Schedule of Deductions
B. Perform quality work*	All check points completed, equipment deficiencies corrected in conformance with quality standards, Section C	5%	75% Items 4.a, 5.a, and 8.a; Schedule of Deductions
C. Provide PM records and reports	PM Inspection Record form updated/filed within two working days, completion indicated and deficiencies documented in weekly PM report (paragraph C.9.b)	5%	10% Items 4.a, 5.a, and 8.a; Schedule of Deductions
5. CONTRACT REQUIREMENT: INDEFINITE QUANTITY WORK			
A. Timely completion	Completed within the timeframes specified [paragraphs C.10.b and C.10.c(5)]	5%	20% of Unit Prices, Contract Line Items 0002 and 0003
B. Quality work*	Work performed in conformance with quality standards, Section C	5%	80% of Unit Prices, Contract Line Items 0002 and 0003

WORK REQUIREMENTS (Column 1)	STANDARDS OF PERFORMANCE (Column 2)	MAX ALLOW DEFECT RATE (Column 3)	WEIGHT (Column 4)
ANNEX 1, MAINTENANCE OF BUILDINGS AND STRUCTURES			
1. CONTRACT REQUIREMENT: RELAMPING OF BUILDINGS			
A. Complete work within required time period	Work completed on date scheduled (paragraph C1.3.b)	5%	20% Item 4.b, Schedule of Deductions
B. Perform quality work	All lamps functioning as designed (paragraph C1.3.b)	5%	80% Item 4.b, Schedule of Deductions
!ADD ADDITIONAL ITEMS AS NEEDED FOR ANNEX 1!			
ANNEX 2 - HVAC OPERATION, MAINTENANCE, AND REPAIR			
1. CONTRACT REQUIREMENT: EQUIPMENT OPERATIONS			
A. Quality work*	Equipment operated in conformance with manufacturers recommendations (Clause C2.4)	5%	80% Item 5.b, Schedule of Deductions
B. Operation log sheets	Maintained as specified, submitted with monthly invoice (paragraph C2.4.b)	5%	20% Item 5.b, Schedule of Deductions
2. CONTRACT REQUIREMENT: START-UP/SHUT-DOWN SERVICES			
A. Timely completion	Work completed within !INSERT! calendar days of specified start date (paragraph C2.5.a)	5%	20% Item 5.c, Schedule of Deductions
B. Quality work*	Specific checks, procedures and operational checks performed, equipment deficiencies corrected in accordance with quality standards, Section C.	5%	70% Item 5.c, Schedule of Deductions
C. Work completion report	Submitted within !INSERT! working days after completion of start-up/shut-down, needed repairs identified (paragraph C2.5.a)	5%	10% Item 5.c, Schedule of Deductions
!ADD ADDITIONAL ITEMS AS NEEDED FOR ANNEX 2!			

WORK REQUIREMENTS (Column 1)	STANDARDS OF PERFORMANCE (Column 2)	MAX ALLOW DEFECT RATE (Column 3)	WEIGHT (Column 4)

ANNEX 3 - GROUNDS MAINTENANCE SERVICES

1.A CONTRACT REQUIREMENT: GRASS CUTTING, MAINTENANCE LEVEL I

A. Timeliness	Attachment J-C3-1 and Contractor's approved schedule (paragraph C3.7.a)	2%	15% Item 6.a(1), Schedule of Deductions
B. Debris removed	Collected prior to cutting; removed from site; no clippings left on walks, streets, etc. (paragraph C3.7a)	2%	5% Item 6.a(1), Schedule of Deductions
C. Grass Cut*	Uniform height between !INSERT! and !INSERT! inches, clippings distributed (paragraph C3.7.a)	2%	60% Item 6.a(1), Schedule of Deductions
D. Area trimmed	Matches height and appearance of surrounding mowed area (paragraph C3.7.a)	2%	20% Item 6.a(1), Schedule of Deductions

1.B CONTRACT REQUIREMENT: EDGING, MAINTENANCE LEVEL I

A. Timeliness	Attachment J-C3-1 and Contractor's approved schedule (paragraph C3.7.b)	2%	10% Item 6.a(2), Schedule of Deductions
B. Quality edging*	Clear zone provided ½" wide by 1" deep, vegetation removed from cracks and joints (paragraph C3.7.b)	2%	75% Item 6.a(2), Schedule of Deductions
C. Vegetation/debris removed	Debris from edging removed off site same day (paragraph C3.7.b)	2%	15% Item 6.a(2), Schedule of Deductions

!ADD ADDITIONAL ITEMS AS NEEDED FOR ANNEX 3!

* Unsatisfactory performance of this work requirement will result in an unsatisfactory rating for the entire contract requirement.

ATTACHMENT J-E3

STATISTICALLY EXTRAPOLATED SURVEILLANCE TECHNIQUES

!**********
NOTE TO SPECIFICATION WRITER: This attachment should be included in the specification if random sampling for extrapolated deductions (RSED) will be used as a method of contract surveillance. The user must **ADD** to this attachment the "Table of Sample Sizes" for both Normal and Minimum Sampling Levels, and the "Table of Adjustment Factors for Random Sampling" from the NAVFAC MO-327.
**********!

1. In accordance with the "CONSEQUENCES OF CONTRACTOR'S FAILURE TO PERFORM REQUIRED SERVICES" clause, Section E, the Government may apply statistically extrapolated inspection techniques to either assess the Contractor's performance or determine the amount of payment, or both. Random Sampling for Extrapolated Deductions (RSED) is the statistically extrapolated inspection technique which may be used.

a. When RSED is used for surveillance, payment will be adjusted by the percentage of observed nonconforming items (defect rate) prorated across the total population of services for the invoice period. The defect rate is calculated by deducting an adjustment factor taken from the attached table entitled *Adjustment Factors for Random Sampling* from the observed defect rate found in the sample. Credit is given for defects reworked, both within and without the sample, up to the maximum number of defects for which deductions were originally taken. Observed defects external to the sample will not be used as a basis for extrapolation, but will be considered in payment for rework.

$$\text{Defect rate} = \frac{\text{Number of Defects}}{\text{Number of Services Sampled}} - \text{Adjustment Factor}$$

b. The Government reserves the right to start surveillance using RSED at any time during the contract, to discontinue the use of RSED, and to resume the use of RSED without notice to the Contractor. The Government will use the attached tables entitled *Table of Sample Sizes for Normal Sampling Levels* and *Table of Sample Sizes for Minimum Sampling Levels* to determine sample sizes for RSED. The *Table of Sample Sizes for Minimum Sampling Levels* represents the minimum sample sizes the Government will use for extrapolation. The ACO may increase the size of the samples to that of the "Table of Sample Sizes for Normal Sampling Levels" or greater at his or her discretion.

c. The Maximum Allowable Defect Rate (MADR) is defined as the defect rate above which the Contractor's quality control is unsatisfactory. **THE MADR DOES NOT REPRESENT A THRESHOLD ABOVE WHICH PAYMENT DEDUCTIONS ARE TAKEN. DEDUCTIONS ARE TAKEN FOR ALL DEFECTS (WITH CREDIT FOR REWORK TO THE EXTENT APPROPRIATE) IRRESPECTIVE OF WHETHER THE MADR WAS EXCEEDED OR NOT.** When a defect rate exceeds the MADR, the Contractor will be notified and appropriate administrative actions will be taken in addition to the payment deductions discussed above. The MADR for each work requirement is shown in the Performance Requirements Summary (PRS) Table in Attachment J-E2.

d. Liquidated damages will be assessed for all observed defects, including those outside the sample. Liquidated damages will not be extrapolated.

!**********!

NOTE TO SPECIFICATION WRITER: The following example **MUST BE** tailored based on the actual work requirements and weights included in the Performance Requirements Summary Table, Attachment J-E2.

**********!

2. The following example illustrates the process which will be used to calculate the Contractor's payment when RSED is used for surveillance:

EXAMPLE PAYMENT CALCULATION WHEN RSED IS USED

ROUTINE SERVICE CALLS	WORK REQUIREMENTS TIMELY COMPLETION	QUALITY WORK	COMPLETE E/S FORM
a. Price for work requirement	$ 10500.00	$ 52500.00	$ 7000.00
b. Number service calls during billing period	1000	1000	1000
c. Price per service call (a/b)	$ 10.50	$ 52.50	$ 7.00
d. Number of calls sampled (as desired by Gov't)	178	178	178
e. Observed unsatisfactory calls in sample	12	10	3
f. Observed Defect Rate (e/d)	6.74%	5.62%	1.68%
g. Adjustment Factor *	1.17%	1.09%	.64%
h. Defect Rate (f-g)	5.57%	4.53%	1.04%
i. Number of extrapolated service calls (b x h) (round down to whole number)	55	45	10
j. Observed unsatisfactory calls outside sample	7	6	12
k. Calls satisfactorily reworked by Contractor (at the Government's option)	N/A	12	0
l. Calls reworked by Gov't or others	N/A	0	0
m. Total number of calls to be deducted at Schedule of Deductions Price (i - k - l)	55	33	10
n. Extrapolated Deductions (c x m)	$ 577.50	$ 1732.50	$ 70.00
o. Deductions for cost of Gov't rework	$ 0	$ 0	$ 0
p. Liquidated Damages for Contractor rework [10% x c x (e + j - l)] **	$ 19.95	$ 84.50	$ 10.50
q. Liquidated Damages for Government rework (20% x o) **	$ 0	$ 0	$ 0
r. Total payment deductions (n + o + p + q)	$ 597.45	$ 1816.50	$ 80.50

* From the attached *Adjustment Factors for Random Sampling* table.

** Calculated in accordance with the "CONSEQUENCES OF CONTRACTOR'S FAILURE TO PERFORM REQUIRED SERVICES" clause, Section E.

ATTACHMENT J-G2

INVOICING INSTRUCTIONS

!**********

NOTE TO SPECIFICATION WRITER: A sample invoice format should be included in this Attachment, in a format similar to the contract line items in Section B. A well thought out invoice format simplifies verification of the amount billed and the calculation of payment deductions.

**********!

END OF SECTION J

QUALITY ASSURANCE GUIDE

GUIDE PERFORMANCE WORK STATEMENT FOR

MULTI-FUNCTION PUBLIC WORKS SERVICES

QUALITY ASSURANCE GUIDE
GUIDE PERFORMANCE WORK STATEMENT FOR
MULTI FUNCTION PUBLIC WORKS SERVICES

TABLE OF CONTENTS

QUALITY ASSURANCE GUIDE
GUIDE PERFORMANCE WORK STATEMENT FOR
MULTI-FUNCTION PUBLIC WORKS SERVICES

I. INTRODUCTION. Quality assurance (QA) is a program undertaken by the Government to provide some measure of the quality of goods and services purchased from a Contractor. To accomplish this the Government, in this case the naval shore activity contracting for multi-function public works services, must develop and implement a system that will ensure that the quantity and quality of the goods and services received comply with the requirements of the contract. This QA Guide is designed to assist the Facilities Support Contract Manager (FSCM) or other user in setting up the activity's QA program. The user is advised to refer to the NAVFAC manual MO-327, *Facility Support Contract Quality Management Manual* and the NAVFAC *Random Sampling for Extrapolated Deductions (RSED V3.2)* implementation guide for more detailed information on the development and implementation of a QA Program.

A. Overview. This Guide provides general information on development of a QA Program for monitoring a Multi-Function Public Works Services contract. Specific quality assurance guidance for individual functional areas may be found in the QA Guide of the appropriate NAVFAC GPWS. This Guide is divided into four parts:

1. The *INTRODUCTION* presents an overview and gives information on Quality Assurance Evaluator (QAE) organization, staffing, and training.

2. *QA PLAN DEVELOPMENT* discusses general information and points that should be considered when developing an inspection program for multiple public works services. Suggested methods of surveillance are provided for the major services (e.g. service call work, recurring services, and indefinite quantity work) included in most multi-function contracts.

3. The *SAMPLE QA PLANS* include numerical examples, suggested evaluation work sheets, and sample Monthly Payment Deduction Forms for selected major services included in Section C of this GPWS. These examples are provided only to illustrate the format and level of detail to which all QA plans should be developed. They must be tailored by the user to conform with the tailored PWS, and numerous other QA plans will need to be developed to account for all of the services included in the contract.

4. *CONTRACTOR'S OVERALL PERFORMANCE* discusses how to use the QAE's inspection results to make an overall evaluation of Contractor performance, and provides a sample monthly summary report format.

B. QAE Training. Personnel tasked with monitoring the multi-function Contractor's performance must be experienced in the functions included and adequately trained in QA methods and procedures in order to effectively implement the activity's QA program.

1. NAVFAC P-68, *Contracting Manual*, requires all individuals assigned QAE duties to attend the QAE training course provided by each of the NAVFAC geographical Engineering Field Divisions (EFDs) within six months of their assignment, or have equivalent training as determined by the Contracting Officer. If this training has not been received, the activity should take steps to have the QAE(s) attend the next available course and in the meantime should develop a local training program. The EFD (Code 16) should be contacted for QAE

training scheduling or assistance. Additional training may also be required to ensure that appropriate technical expertise is available to inspect maintenance and repair of HVAC systems, roofing, painting, sewage treatment plants, and the many other technical requirements that may be included in the contract.

2. In addition to being intimately familiar with the technical requirements of their particular functional areas, QAEs must also coordinate with the appropriate customer(s) and/or functional area manager(s), such as the Family Housing Director, Transportation Director, Utilities Engineer, etc., and familiarize themselves with the procedures which will be used to order work, how the QAE will be notified when work has been completed and is ready for inspection, how customer complaints will be handled, etc.

C. QAE Organization and Staffing

1. The NAVFAC P-318, *Organization and Functions for Public Works Departments*, and NAVFAC P-68 discuss the responsibilities of the organizations and individuals responsible for the day-to-day administration of facilities support contracts. Ideally, QAEs should organizationally report to the FSCM or other individual in the activity's contract administration organization. However, in some cases it may be more practical for QAEs to be appointed on a collateral duty basis from other departments or tenant activities, such as the Fire Department, Security Department, etc.

2. Regardless of where QAE's are located organizationally, the most well developed QA program will not be effective if QAE staffing is inadequate. Ideally QAE staffing should be based on a pre-determined number of contract inspections (QA plans) and related work requirements rather than on the availability of QAEs. Once adequate QA plans have been developed, the user should perform a staffing analysis to determine the required QAE staffing, then if appropriate, compare the results with the current effort. This analysis involves determining the average time needed to complete each of the inspections required (sample size or quantity of work) by each plan including travel time requirements, time required to prepare monthly reports and perform other administrative duties, time to perform any nonsurveillance duties, (e.g. training, safety meetings, preparing contract modifications, making award fee determinations, etc.), etc. The NAVFAC EFDs have experience in conducting these staffing analyses and should be contacted if assistance is needed.

II. QUALITY ASSURANCE PLAN DEVELOPMENT. Ideally, QA plan development should be accomplished concurrently with development of the PWS, and viewed as a single process. The two are closely interrelated since one (the PWS) defines required work outputs and quality standards while the other defines how work outputs will be observed and measured. Many of the inspection problems which tend to turn up after contract award can be avoided by careful up-front coordination between the specification and QA plan writers. Chapters 4 and 6 of NAVFAC MO-327 discuss methods of surveillance, inspection documentation, development of QAE schedules, and other issues related to the development of QA plans.

A. Functional Considerations. Multi-function public works services monitoring poses several unique requirements for the QAE. The following considerations are offered for the user's information. Additional functional considerations may be found in the QA Guide of each NAVFAC GPWS.

1. Customer Complaint Program. A properly established and administered customer complaint program can be of great benefit in identifying poorly

performed work and reducing the number of multiple service calls ordered to correct the same problem. The method of making building monitors aware of the contract's requirements and how to call in complaints; and the internal procedures used to receive, record, respond to, and track customer complaints needs to be carefully coordinated between the activity's work reception center and the FSCM prior to contract award. Each service call received by the activity's work reception center should be screened to ensure it is not a repeat call for a repair previously completed by the Contractor, which is still under warranty. Such calls are complaints, even if not identified as such by the building monitors, and should be passed to the appropriate QAE for validation and rework if appropriate. A Customer Complaint form, similar to that contained in Appendix H of NAVFAC MO-327, should be used to record actions taken on each complaint received. For some complaints the building monitor may simply be told to call back if the Contractor has not satisfactorily completed the work by a given time and date, but most complaints will require an on-site validation visit by the QAE. Adequate QAE time must be made available to validate complaints, or building monitors will soon perceive that complaining is a "waste of time". Of course, payment deductions may be made only on those complaints which are validated by the QAE.

2. Rework. As specified in the "CONSEQUENCES OF CONTRACTOR'S FAILURE TO PERFORM REQUIRED SERVICES" clause in Section E, the Government may require the Contractor to reperform work that has been identified as being poorly performed or not performed, provided a reasonable amount of time is allowed for the rework to be completed. The following should be considered.

a. QAEs will be too busy performing surveillance during most of the day to stop and call the Contractor every time a deficiency is found or a complaint is received. Therefore, the Contractor should be notified of customer complaints and discrepancies found by QAEs only at the end of the working day, unless the deficiency could affect the health, safety, or comfort of the occupants and cannot wait until the next scheduled work day for correction. The easiest way to make the Contractor aware of all noted deficiencies in writing, as required by the " the "CONSEQUENCES OF CONTRACTOR'S FAILURE TO PERFORM REQUIRED SERVICES" clause, is to provide copies of completed EVALUATION WORK SHEETS daily. As documentation that work sheets were received, the Contractor may be asked to sign and return each form. However, QAEs should not spend time "chasing down" the Contractor's representative to get work sheets signed.

b. Rework should normally be allowed for defects in quality of work; however, defects in some work requirements, such as timely response and timely completion, obviously cannot be reworked.

c. Invoice payment deductions should always be made when a documented deficiency is not satisfactorily reworked. Liquidated damages should be deducted for all documented deficiencies, whether or not rework is accomplished.

B. Selection of Methods of Surveillance. Chapter 4 of NAVFAC MO-327 provides a general discussion of the five methods of surveillance available and the factors that influence which method(s) should be selected for use. The factors influencing the selection of a method of surveillance for a given service include the number (population) of items to be inspected; the importance, characteristics, and location of the service; and the availability of QAE resources. Specific factors which influence the selection of evaluation methods for the major services in a multi-function public works contract are

discussed below for each method of surveillance. Factors affecting selection for services in specific functional areas are included in the appropriate NAVFAC GPWS.

1. One Hundred Percent Inspection. One hundred percent inspection is generally used for those services which are considered very important, those which have relatively small monthly populations, and those included in the indefinite quantity portion of the contract. 100% inspection should be considered for the following multi-function services.

a. Emergency Service Calls. Since proper performance of emergency calls can have a major impact on the health, safety, and comfort of customers, as well as critical activity missions, 100% inspection should be seriously considered. If service calls are properly classified, the number of emergency calls at the typical activity would not make 100% inspection impractical.

b. Indefinite Quantity Work. Before the QAE can legitimately certify satisfactory completion of work on an indefinite quantity delivery order, the job obviously must be inspected at least once. Therefore, 100% inspection is recommended for all indefinite quantity delivery orders.

c. Other Services. 100% is also recommended for other very important services that may be included in a multi-function contract, such as elevator certifications, critical pest control applications, selected hazardous waste collection and disposal operations, certification of unfired pressure vessels, chemical treatment of chilled and hot water systems, and other similar requirements.

2. Random Sampling. Surveillance based on random sampling evaluates a portion of the work, accurately estimating Contractor performance through the use of statistical theory. Random sampling is most useful on large homogeneous populations where 100% inspection is not required or feasible. Also, if appropriate provisions are included in the specification and the random sampling is properly conducted, the percentage of defective work items found in the sample (less a small adjustment for inaccuracies) may be extrapolated and deducted from the Contractor’s payment invoice. Details on the use of random sampling with or without extrapolated deductions may be found in the NAVFAC RSED (V3.2) implementation guide. Random sampling will likely be appropriate and should be considered for a number of public works type services typically found in a multi-function contract, including the following.

a. Routine Service Calls. The large population of routine service calls in the typical multi-function contract makes it ideally suited for random sampling, both with and without extrapolated deductions. Although calls vary somewhat in size and type of work, the population can still be considered homogeneous since all calls contain the same work requirements (timely completion, quality of work, proper procedures). However, routine calls could not be included in the same population with other contract requirements, such as urgent or emergency service calls, since their work requirements are different. Sample QA plan #3 for routine service calls may be used for random sampling either with or without extrapolated deductions. Forms are included in the plan for both methods of calculating deductions from the Contractor’s invoice.

b. Urgent Service Calls. Although planned sampling is used as the method of surveillance in sample QA Plan #2, if the population is large enough random sampling would also be appropriate for urgent service calls. However, if

the number of calls is relatively small, as is the case with many contracts, the sample size would be so large that planned sampling would be more appropriate. The user must weigh the benefits of random sampling with the cost in terms of inspection effort required when determining which method of use.

c. Preventive Maintenance Inspection and Service. Random sampling **WITHOUT** extrapolated deductions may be used for the inspection of preventive maintenance (PM) inspection services, **IF** the population of services is large enough to make random sampling practical. The population will likely **NOT** be homogeneous enough to make RSED practical, i.e., a daily PM check on a centrifugal water chiller system requires a vastly different amount of the Contractor's effort than a window A/C unit. Also, since unit prices are obtained for each different type of inspection in the Schedule of Deductions, it would not be practical to extrapolate payment deductions over a large population of different PM services.

d. Other Services. Random sampling should also be considered for other services that may be included in a multi-function public works contract such as custodial, grounds maintenance, solid waste collection, and similar requirements.

3. Planned Sampling. Planned sampling is similar to random sampling in that it is based on evaluating a portion of the work as the basis for estimating the Contractor's performance. Samples are selected based on a subjective rationale and the sample size is arbitrarily determined. Planned sampling is useful when population sizes are not large enough or homogeneous enough to make random sampling practical. Planned sampling is typically used for the inspection of urgent service calls, preventive maintenance inspections, equipment operations, and many, many more of the other recurring services typically included in a multi-function contract, since most of these services have small and/or non-homogeneous populations.

4. Unscheduled Inspections. An unscheduled inspection is what the name implies. Since it does not provide any measure of the Contractor's performance it should be used only to support other methods and never as a primary method of surveillance.

5. Validated Customer Complaints. This method is very appropriate as a supportive method of surveillance for urgent and routine service calls, custodial services, solid waste collection, and many other services in the typical multi-function public works contract. As with unscheduled inspections, it should normally not be used as a primary method of surveillance. See paragraph II.A.1 of this QA Guide.

C. Performance Requirements Summary. As noted previously in the User's Guide (paragraph III.E), the PRS table will be used primarily by the Contracting Officer in conjunction with the "CONSEQUENCES OF CONTRACTOR'S FAILURE TO PERFORM REQUIRED SERVICES", "ESTIMATING THE PRICE OF NONPERFORMED OR UNSATISFACTORY WORK", and "SCHEDULE OF DEDUCTIONS" clauses, in making payment deductions for unsatisfactory performance or nonperformance of contract requirements. The table is also very useful in the preparation of QA plans since it summarizes the work requirements, standards of performance, and maximum allowable defect rates (MADRs) for each contract requirement. A sample PRS table, which illustrates selected contract requirements and work requirements for a number of typical public works functions, is provided in Attachment J-E2. Of course this table must be modified and added to so that all of the technical services in the

contract are included. NAVFAC MO-327 and the NAVFAC RSED (V3.2) implementation guide provide guidance on the development of PRS tables and calculation of payment deductions, and should be referred to by the user.

1. MADRs are defect rates above which the Contractor's quality control is considered unsatisfactory for any particular work requirement. The MADR selected for any particular work requirement should reflect both the expected population of services and the requirement's importance. For example, the MADR for timely emergency service call response should be smaller than that for urgent service call response. Note that MADRs do not affect sample sizes or the method of calculating payment deductions in any way. Suggested values are included in the examples in Attachment J-E2; however, these must be tailored by the user.

2. In the "WEIGHT" column the value of each work requirement is specified as a percentage of the price of the contract requirement with which it is associated. Careful consideration must be given to objectively assigning these percentages since they will be used in making payment deductions. One method which may be used is to calculate the cost of each work requirement using Engineered Performance Standards (EPS) and then use these costs to determine the percentage to be assigned to each work requirement. Values for timeliness work requirements will be the most difficult to determine since they are by nature subjective. The example percentages suggested in GPWS Attachment J-E2 should be carefully reviewed and tailored by the user.

III. SAMPLE QUALITY ASSURANCE PLANS. There are five sample QA plans provided in this GPWS to illustrate suggested formats, the level of detail needed, how to use inspection results to calculate payment deductions, etc. Of course the user will need to add many additional plans (from applicable functional GPWS) to adequately inspect each of the many services normally included in a multi-function public works services contract. The following sample plans are included.

QA Plan #1 - Emergency Service Calls
QA Plan #2 - Urgent Service Calls
QA Plan #3 - Routine Service Calls
QA Plan #4 - Preventive Maintenance
QA Plan #5 - Indefinite Quantity Work

A. Of course, each sample QA plan must be tailored to reflect actual technical specification requirements, changes made by the user to Section C of the GPWS and the PRS table, and changes in methods of surveillance, evaluation work sheets, etc.

B. QA plans should be self contained documents written in sufficient detail to preclude extensive reference to other documents or manuals. Each plan should contain examples of all evaluation work sheets, summary reports, and other forms which will be used for documenting Contractor performance. Sample selection, evaluation, analysis of results, and other procedures should be as detailed as possible.

C. Sample size determinations, sampling procedures, and payment deduction calculations in the sample QA plans are based on manual methods. The user should be aware that computerized methods of performing these functions have been developed which greatly reduce the time and number of manual calculations required, especially when random sampling is selected as the method of

surveillance. Typically, these computer programs will determine the sample size required for a given population of services to be randomly sampled, select the appropriate number of random numbers within a given range, summarize inspection results and perform associated payment calculations, perform random sampling confidence calculations, etc. Interested users should contact their geographical EFD for copies of this and other programs which may be available.

QUALITY ASSURANCE PLAN #1
EMERGENCY SERVICE CALLS

1. Contract Requirement. Emergency Service Calls

Work Requirements	Standards of Performance
a. Respond to calls within required time period	At job site within !INSERT TIME! with proper tools and equipment [paragraph C.8.d(1)]
b. Complete work within required time period	Completed within requirements for urgent or routine call, if appropriate [paragraph C.8.d(1)]
c. Perform quality service call work	Emergency condition arrested, repairs completed in conformance with quality standards, Section C
d. Proper procedures followed	Work authorization completed and returned within one working day, properly classified after regular hours [paragraphs C.8.b(2) and C.8.e]

2. Primary Method of Surveillance. One hundred percent inspection

3. Maximum Allowable Defect Rate (MADR)

a. 2%
b. 2%
c. 2%
d. 2%

4. Quantity of Work. Average by month:

JAN	35	APR	22	JUL	22	OCT	21
FEB	23	MAY	20	AUG	21	NOV	31
MAR	28	JUN	21	SEP	11	DEC	21

5. Level of Surveillance. N/A

6. Sample Size. N/A

7. Sampling Procedures. N/A

8. Evaluation Procedures. As soon as possible after completion of each emergency service call and turn in of completed work authorization forms, the appropriate QAE will make an on-site visit and evaluate each of the work requirements listed in paragraph 1 as either satisfactory (S) or unsatisfactory (U) on the attached EVALUATION WORK SHEET. A brief description of any noted defects will be provided and rework information will be recorded, if appropriate. In most all instances where the quality of work is considered unsatisfactory, timely completion will also be considered unsatisfactory. Rework will normally be allowed when practical, and must be completed by the Contractor within 24 hours of notification. Therefore, each call marked for rework must be reinspected by the QAE to see if the work was satisfactorily

completed, and appropriate notations completed on the EVALUATION WORK SHEET. Provide copies of all negative EVALUATION WORK SHEETS to the Contractor.

9. Analysis of Results. At the end of the month the designated QAE will summarize the results of the month's inspections and calculate Observed Defect Rates (ODRs) and recommended payment deductions for **EACH** work requirement on a MONTHLY PAYMENT DEDUCTION FORM. An sample MONTHLY PAYMENT DEDUCTION FORM is attached.

a. If the ODR for a work requirement (Item F of the MONTHLY PAYMENT DEDUCTION FORM) is equal to or less than its MADR, overall performance of that requirement is satisfactory. Payment deductions will be made for all documented defects, as calculated on the MONTHLY PAYMENT DEDUCTION FORM. If the ODR is less than ½ of the MADR the QAE should recommend to the FSCM to notify the Contractor that performance is excellent and to keep up the good work.

b. If the ODR is greater than the MADR, overall performance of that work requirement is unsatisfactory and the QAE should recommend to the FSCM that a CDR be issued to the Contractor, or that stronger action be taken. Payment deductions will be made as calculated on the MONTHLY PAYMENT DEDUCTION FORM.

EVALUATION WORK SHEET
EMERGENCY SERVICE CALLS
QA PLAN #1

CONTRACT NUMBER_____

DATE	WORK AUTH NUMBER	LOCATION	WORK DESCRIPTION	WORK REQUIREMENTS				REWORK ORDERED DATE/TIME	REWORK COMPLETED DATE/TIME	REMARKS
				TIMELY RESPONSE	TIMELY COMPLETION	QUALITY WORK	PROPER PROCEDURES			

_____ _____

CONTRACTOR'S SIGNATURE/DATE QAE'S SIGNATURE/DATE

SAMPLE

MONTHLY PAYMENT DEDUCTION FORM
EMERGENCY SERVICE CALLS

CONTRACT NUMBER_____

SUMMARY FOR THE PERIOD 1 AUG 92 - 31 AUG 92	TIMELY RESPONSE	TIMELY COMPLETION	QUALITY WORK	PROPER PROCEDURES
A. Relative Value of Services (from PRS)	35%	10%	45%	10%
B. Cost of Services (Schedule of Deductions Item 1 x A ÷ 100)	$1225.00	$ 350.00	$ 1575.00	$ 350.00
C. Actual Number of Calls Completed	35	35	35	35
D. Cost per Call (B ÷ C)	$ 35.00	$ 10.00	$ 45.00	$ 10.00
E. Number of Observed Unsat Calls	6	2	1	1
F. Observed Defect Rate (ODR) (E ÷ C x 100)	17.1%	5.7%	2.8%	2.8%
G. Value of Unsat Performed Work (D x E)	$ 210.00	$ 20.00	$ 45.00	$ 10.00
H. Deduct for Liquidated Damages (G x .1)	$ 21.00	$ 2.00	$ 4.50	$ 1.00
I. Number of Calls Reworked	N/A	N/A	1	1
J. Payment for Rework (D x I)	N/A	N/A	$ 45.00	$ 10.00
K. Other Adjustments ("-" indicates a deduction)	$ 0	$ 0	$ 0	$ 0
L. Total Deductions (G + H - J + K)	$ 231.00	$ 22.00	$ 4.50	$ 1.00

TOTAL PAYMENT DEDUCTIONS = $ 258.50

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AUTHORIZED SIGNATURE/DATE

QUALITY ASSURANCE PLAN #2
URGENT SERVICE CALLS

1. Contract Requirement. Urgent Service Calls

Work Requirements	Standards of Performance
a. Respond to calls within required time period	At job site within !INSERT TIME! (regular hours) or !INSERT TIME! (after hours) with proper tools and equipment [paragraph C.8.d(2)]
b. Complete work within required time period	Prosecuted to completion and completed within !INSERT TIME! [paragraph C.8.d(2)]
c. Perform quality service call work	Repairs completed in conformance with quality standards, Section C
d. Proper procedures followed	Work authorization completed and returned within one working day, properly classified after regular hours [paragraphs C.8.b(2) and C.8.e]

2. Primary Method of Surveillance. Planned sampling supported by unscheduled inspections and validated customer complaints.

3. Maximum Allowable Defect Rate (MADR)

a. 3%
b. 3%
c. 3%
d. 3%

4. Quantity of Work. Average by month:

JAN	419	APR	381	JUL	543	OCT	421
FEB	372	MAY	417	AUG	515	NOV	272
MAR	296	JUN	555	SEP	360	DEC	276

5. Level of Surveillance. The normal level of surveillance will be used initially for the contract. Go to increased surveillance if the observed defect rate (ODR) for response or quality of work exceeds the MADR during any given month. If only the ODR for completion or procedures exceeds the MADR, consider increasing the level of surveillance for those work requirements only. Go to reduced surveillance if the ODRs for both response and quality of work are less than the MADR for two consecutive months. If at reduced, return to normal level if in any month the ODR for either response or quality of work exceeds the MADR.

6. Sample Size. The following sample sizes are established for each level of surveillance.

Reduced - 10% of the calls completed
Normal - 25% of the calls completed
Increased - 50% of the calls completed

7. Sampling Procedures. As completed urgent service call work authorization forms are turned in by the Contractor, the designated QAE will arbitrarily select every fourth work authorization form (if at normal surveillance) and pass to the appropriate QAE for that functional area for inspection. Choose every tenth call if at reduced surveillance, every other call if at increased surveillance.

8. Evaluation Procedures. As soon as possible after the call has been selected, the appropriate QAE will make an on-site visit and evaluate each of the work requirements listed in paragraph 1 as either satisfactory (S) or unsatisfactory (U) on the attached EVALUATION WORK SHEET. A brief description of any noted defects will be provided and rework information will be recorded, if appropriate. In most all instances when the quality of work is considered unsatisfactory, timely completion will also be considered unsatisfactory. Visiting the site as soon as possible after completion of the work is very important so that the work is "fresh" and relatively easy to inspect. Evaluate response, completion, and proper procedures based on completed work authorization and service call log information. Provide copies of all negative inspection reports to the Contractor.

a. Customer Complaints. The QAE will validate each customer complaint received on the standard customer complaint form. Normally, site visits will be required to validate complaints.

b. Unscheduled Inspections. Unscheduled inspections may be conducted on any urgent service call, but should be limited to those of particular importance where performance problems have been noted in the past, etc. Unscheduled inspections should be documented on a separate EVALUATION WORK SHEET from that used for planned sampling.

c. Rework. Rework will normally be allowed when practical, and must be completed by the Contractor within 24 hours of notification. Therefore, each call marked for rework must be reinspected by the QAE to see if the work was satisfactorily completed, and appropriate notations completed on the EVALUATION WORK SHEET.

9. Analysis of Results. At the end of the month the designated QAE will summarize the results of the month’s inspections, calculate ODRs and recommended payment deductions for **EACH** work requirement on a MONTHLY PAYMENT DEDUCTION FORM, and determine if any change in the level of surveillance is needed for the coming evaluation period (see paragraph 5 above). An sample MONTHLY PAYMENT DEDUCTION FORM is attached.

a. If the ODR for a work requirement (Item G of the MONTHLY PAYMENT DEDUCTION FORM) is equal to or less than its MADR, overall performance of that requirement is satisfactory. If the ODR is less than ½ of the MADR the QAE should recommend to the FSCM to notify the Contractor that performance is excellent and to keep up the good work, and should consider whether or not reduced surveillance should be used for the coming evaluation period. Payment deductions will be made for all documented defects, as calculated on the MONTHLY PAYMENT DEDUCTION FORM.

b. If the ODR for a work requirement is greater than the MADR, overall performance is unsatisfactory and the QAE should recommend to the FSCM that a CDR be issued to the Contractor, or that stronger action be taken. Consider whether or not increased surveillance should be used for the coming evaluation

period. Payment deductions will be made as calculated on the MONTHLY PAYMENT DEDUCTION FORM.

EVALUATION WORK SHEET
URGENT SERVICE CALLS
QA PLAN #2

CONTRACT NUMBER_____

DATE	WORK AUTH NUMBER	LOCATION	WORK DESCRIPTION	WORK REQUIREMENTS				REWORK ORDERED DATE/TIME	REWORK COMPLETED DATE/TIME	REMARKS
				TIMELY RESPONSE	TIMELY COMPLETION	QUALITY WORK	PROPER PROCEDURES			

_____ _____

CONTRACTOR'S SIGNATURE/DATE QAE'S SIGNATURE/DATE

SAMPLE

MONTHLY PAYMENT DEDUCTION FORM
URGENT SERVICE CALLS

CONTRACT NUMBER_____

SUMMARY FOR THE PERIOD 1 AUG 92 - 31 AUG 92	TIMELY RESPONSE	TIMELY COMPLETION	QUALITY WORK	PROPER PROCEDURES
A. Relative Value of Services (from PRS)	20%	10%	60%	10%
B. Cost of Services (Schedule of Deductions Item 2 x A ÷ 100)	$7542.00	$3771.00	$22626.00	$3771.00
C. Actual Number of Calls Completed	419	419	419	419
D. Cost per Call (B ÷ C)	$ 18.00	$ 9.00	$ 54.00	$ 9.00
E. Sample Size (SS)	104	104	104	104
F. Number of Observed Sampled Unsat Calls	12	5	4	4
G. Observed Defect Rate (ODR) (F ÷ E x 100)	11.5%	4.8%	3.8%	3.8%
H. Validated Customer Complaints (# Unsat)	4	0	7	0
I. Unscheduled Inspections (# Unsat)	4	1	0	0
J. Value of Unsat Performed Work [(F + H + I) x D]	$ 360.00	$ 54.00	$ 594.00	$ 36.00
K. Deduct for Liquidated Damages (J x .1)	$ 36.00	$ 5.40	$ 59.40	$ 3.60
L. Number of Calls Reworked				
(1) Sampled Calls	N/A	N/A	4	0
(2) Customer Complaints	N/A	N/A	6	0
(2) Unscheduled Inspections	N/A	N/A	0	0
M. Payment for Rework [L(1) + L(2) + L(3)] x D	N/A	N/A	$ 540.00	$ 0
N. Other Adjustments ("-" indicates a deduction)	$ 0	$ 0	$ 0	$ 0
O. Total Deductions (J + K - M + N)	$ 396.00	$ 59.40	$ 113.40	$ 39.60

TOTAL PAYMENT DEDUCTIONS = $ 608.40

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AUTHORIZED SIGNATURE/DATE

QUALITY ASSURANCE PLAN #3
ROUTINE SERVICE CALLS

1. Contract Requirement. Routine Service Calls

Work Requirements	Standards of Performance
a. Complete work within required time period	Work completed within !INSERT NUMBER! working days [paragraph C.8.d(3)]
b. Perform quality service call work	Repairs completed in conformance with quality standards, Section C
c. Proper procedures followed	Work authorization completed and returned within one working day, properly classified after regular hours [paragraphs C.8.c(2) and C.8.e]

2. Primary Method of Surveillance. Random sampling !CHOOSE EITHER "WITH" OR "WITHOUT"! extrapolated deductions supported by unscheduled inspections and validated customer complaints.

3. Maximum Allowable Defect Rate (MADR)

a. 5%
b. 5%
c. 5%

4. Quantity of Work. Average by month:

JAN	998	APR	977	JUL	1136	OCT	1066
FEB	1011	MAY	1064	AUG	1142	NOV	967
MAR	972	JUN	1139	SEP	1185	DEC	956

5. Level of Surveillance. The normal level of surveillance table will be used initially for the contract. Go to minimum surveillance if the observed defect rate (ODR) is less than the MADR for the quality of work during any given month. If at minimum surveillance the ODR exceeds the MADR, return to normal surveillance during the next evaluation period.

6. Sample Size. The quantity of work on which the sample size is based must be large enough to ensure that it will be larger than the actual number of calls received during the month. Therefore, at the beginning of each month take the expected quantity of work for that month from paragraph 4 above and add 10% to arrive at the estimated maximum number of calls. For example, the January sample size would be based on a maximum estimated number of 1098 calls (998 + 100). Now go to the sample size table for the current level of surveillance and find the appropriate sample size for the expected quantity of 1098. If at normal surveillance this would be 181.

7. Sampling Procedures. Using a random number table or other method, generate random numbers (181 in the previous example) which fall between one and the estimated maximum number of calls (1098) and put into sequential order. As completed routine service calls are turned in by the Contractor daily, they will

be numbered sequentially at the top of the work authorization form by the designated QAE. When an assigned number matches one of those selected in the random sample, the QAE for that functional area will inspect the call.

8. Evaluation Procedures. As soon as possible after the call has been selected, the appropriate QAE will make an on-site visit and evaluate each of the work requirements listed in paragraph 1 as either satisfactory (S) or unsatisfactory (U) on the attached EVALUATION WORK SHEET. A brief description of any noted defects will be provided and rework information will be recorded, if appropriate. In most all instances when the quality of work is considered unsatisfactory, timely completion will also be considered unsatisfactory. Visiting the site as soon as possible after completion of the work is very important so that the work is "fresh" and relatively easy to inspect. Evaluate timeliness and proper procedures based on completed work authorization and service call log information. Provide copies of all negative EVALUATION WORK SHEETS to the Contractor.

a. Customer Complaints. The QAE will validate each customer complaint received on the standard customer complaint form. Normally, site visits will be required to validate complaints.

b. Unscheduled Inspections. Unscheduled inspections may be conducted on any routine service call, but should be limited to those of particular importance where performance problems have been noted in the past, etc. Unscheduled inspections should be documented on a separate EVALUATION WORK SHEET from that used for random sampling.

c. Rework. Rework will normally be allowed when practical, and must be completed by the Contractor within 24 hours of notification. Therefore, each call marked for rework must be reinspected by the QAE to see if the work was satisfactorily completed, and appropriate notations completed on the EVALUATION WORK SHEET.

9. Analysis of Results. At the end of the month an adjustment in the sample size originally selected may be required by re-entering the sample size table with the actual number of routine calls completed that month. Select the appropriate sample size and check that at least that many calls were inspected during the month. In some cases additional random numbers will need to be selected and the corresponding calls inspected by the QAE. Selecting the additional random numbers can be accomplished most easily by computer program. After any additional calls are inspected, the designated QAE will summarize the results of the month’s inspections and calculate ODRs and recommended payment deductions on a MONTHLY PAYMENT DEDUCTION FORM. Sample MONTHLY PAYMENT DEDUCTION FORMs are attached; one for random sampling without extrapolated deductions and one for random sampling with extrapolated deductions.

a. If the ODR for a work requirement (Item G of the MONTHLY PAYMENT DEDUCTION FORM) is equal to or less than the MADR, overall performance of that requirement (Contractor’s Rating) is satisfactory. If the ODR is less than ½ of the MADR the QAE should recommend to the FSCM to notify the Contractor that performance is excellent and to keep up the good work. Consider whether or not minimum surveillance should be used for the coming evaluation period (see paragraph 5 above). Payment deductions will be made for all documented defects, as calculated on the MONTHLY PAYMENT DEDUCTION FORM.

b. If the ODR for a work requirement is greater than the MADR, overall performance of that requirement is unsatisfactory and the QAE should recommend to the FSCM that a CDR be issued to the Contractor, or that stronger action be taken. Retain or return to the normal level of surveillance during the coming evaluation period (see paragraph 5 above). Payment deductions will be made as calculated on the MONTHLY PAYMENT DEDUCTION FORM.

EVALUATION WORK SHEET
ROUTINE SERVICE CALLS
QA PLAN #3

CONTRACT NUMBER_____

DATE	WORK AUTH NUMBER	RANDOM NUMBER	LOCATION	WORK REQUIREMENTS			REWORK ORDERED DATE/TIME	REWORK COMPLETED DATE/TIME	REMARKS
				TIMELY COMPLETION	QUALITY WORK	PROPER PROCEDURES			

_____ _____

CONTRACTOR'S SIGNATURE/DATE QAE'S SIGNATURE/DATE

SAMPLE

MONTHLY PAYMENT DEDUCTION FORM - ROUTINE SERVICE CALL WORK
(RANDOM SAMPLING WITHOUT EXTRAPOLATED DEDUCTIONS)

CONTRACT NUMBER_____

	SUMMARY FOR THE PERIOD 1 AUG 92 - 31 AUG 92	TIMELY COMPLETION	QUALITY OF WORK	PROPER PROCEDURES
A.	Relative Value of Services (from PRS)	15%	75%	10%
B.	Cost of Services (Schedule of Deductions Item 3 x A ÷ 100)	$ 10500.00	$ 52500.00	$ 7000.00
C.	Actual Number of Calls Completed	1000	1000	1000
D.	Cost per Call (B ÷ C)	$ 10.50	$ 52.50	$ 7.00
E.	Sample Size (SS)	178	178	178
F.	Number of Sampled Observed Unsat Calls	12	10	10
G.	Observed Defect Rate (ODR) (F ÷ E x 100)	6.74%	5.62%	5.62%
H.	Adjustment Factor (from table)	1.17%	1.09%	1.09%
I.	Defect Rate (G - H)	5.57%	4.53%	4.53%
J.	Validated Customer Complaints (# Unsat)	4	4	4
K.	Unscheduled Inspections (# Unsat)	5	2	2
L.	Value of Unsatisfactory Performed Work [(F + J + K) x D]	$ 220.50	$ 840.00	$ 112.00
M.	Deduct for Liquidated Damages (L x .1)	$ 22.05	$ 84.00	$ 11.20
N.	Number of Calls Reworked			
	(1) Sampled Calls	N/A	6	6
	(2) Customer Complaints	N/A	4	4
	(3) Unscheduled Inspections	N/A	2	0
O.	Payment for Rework [N(1) + N(2) + N(3)] x D	N/A	$ 630.00	$ 70.00
P.	Other Adjustments (" - " indicates a deduction)	$ 0	$ 0	$ 0
Q.	Total Deductions (L + M - O + P)	$ 242.55	$ 294.00	$ 53.20

TOTAL PAYMENT DEDUCTIONS = $ 589.75

_____
AUTHORIZED SIGNATURE/DATE

MONTHLY PAYMENT DEDUCTION FORM - ROUTINE SERVICE CALL WORK
(RANDOM SAMPLING WITH EXTRAPOLATED DEDUCTIONS)

CONTRACT NUMBER_____

	SUMMARY FOR THE PERIOD 1 AUG 92 - 31 AUG 92	TIMELY COMPLETION	QUALITY OF WORK	PROPER PROCEDURES
A.	Relative Value of Services (from PRS)	15%	75%	10%
B.	Cost of Services (Schedule of Deductions Item 3 x A ÷ 100)	$ 10500.00	$ 52500.00	$ 7000.00
C.	Actual Number of Calls Completed	1000	1000	1000
D.	Cost per Call (B ÷ C)	$ 10.50	$ 52.50	$ 7.00
E.	Sample Size (SS)	178	178	178
F.	Number of Sampled Observed Unsat Calls	12	10	10
G.	Observed Defect Rate ((ODR) (F ÷ E x 100)	6.74%	5.62%	5.62%
H.	Adjustment Factor (from table)	1.17%	1.09%	1.09%
I.	Deductible Defect Rate (G - H)	5.57%	4.53%	4.53%
J.	Extrapolated Number of Defects [(C x I) ÷ 100] (round down to whole number)	55	45	45
K.	Value of Unsat Performed Work (J x D)	$ 577.50	$ 2362.50	$ 315.00
L.	Validated Customer Complaints (# Unsat)	2	4	0
M.	Unscheduled Inspections (# Unsat)	5	2	2
N.	Deduct for Liquidated Damages [(F + L + M) x D x .1]	$ 19.95	$ 84.00	$ 8.40
O.	Number of Calls Reworked			
	(1) Sampled Calls	N/A	6	6
	(2) Customer Complaints	N/A	4	0
	(3) Unscheduled Inspections	N/A	2	0
P.	Payment for Rework [O(1) + O(2) + O(3)] x D	N/A	$ 630.00	$ 42.00
Q.	Other Adjustments (" - " indicates a deduction)	$ 0	$ 0	$ 0
R.	Total Deductions (K + N - P + Q)	$ 597.45	$ 1816.50	$ 281.40

TOTAL PAYMENT DEDUCTIONS = $ 2695.35

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AUTHORIZED SIGNATURE/DATE

QUALITY ASSURANCE PLAN #4
PREVENTIVE MAINTENANCE

1. Contract Requirement. Preventive Maintenance (PM)

Work Requirements		Standards of Performance
a.	Complete work within required time period	Work completed by date specified in approved PM schedule (paragraph C.9.b)
b.	Perform quality work	All check points completed, equipment deficiencies corrected in conformance with quality standards, Section C
c.	Provide PM records and reports	PM Inspection Record form updated/filed within two working days, completion indicated and deficiencies documented in weekly PM report (paragraph C.9.b)

2. Primary Method of Surveillance. One hundred percent inspection for work requirement a; planned sampling supported by unscheduled inspections for all others.

3. Maximum Allowable Defect Rate (MADR)

a. 5%
b. 5%
c. 5%

4. Quantity of Work. The quantity of work per month will equal the number of PM inspections scheduled by the Contractor.

5. Level of Surveillance. Not applicable for work requirement a. For all other work requirements the normal level of surveillance will be used initially for the contract. Go to increased surveillance if the observed defect rate (ODR) for quality of work exceeds the MADR during any given month. If only the ODR for completion report exceeds the MADR, consider increasing the level of surveillance for that work requirement only. Go to reduced surveillance if the ODR for quality of work is less than one half the MADR for two consecutive months.

6. Sample Size. Not applicable for work requirement a. For all other work requirements the following sample sizes are established for each level of surveillance:

Reduced - 5% of the PMs completed
Normal - 10% of the PMs completed
Increased - 20% of the PMs completed

7. Sampling Procedures. Not applicable for work requirement a. For all other work requirements the designated QAE will choose every tenth PM (if at normal surveillance) from the schedule of completed PMs (including those PMs completed that were deferred from previous weeks) that is submitted by the Contractor each Monday. Choose every fifth PM if at increased surveillance, and every twentieth PM if at reduced surveillance.

8. Evaluation Procedures. In recording the results of inspections, note that separate EVALUATION WORK SHEETs will be filled out for each different type of PM service performed during the month. For example, if monthly, quarterly, and semiannual air handler PM services are to be performed during the month, three EVALUATION WORK SHEETs will be required.

a. Timely Completion. The appropriate QAE will review the Contractor's PM completion report each Monday and list on an EVALUATION WORK SHEET each of the scheduled PM inspections reported by the Contractor as being incomplete. All three of the work requirements for these PMs will be marked as unsatisfactory (U). At this time also review those PM inspections not completed during previous weekly reports which the Contractor has now listed as complete, and fill out the rework portion of the appropriate EVALUATION WORK SHEET(s).

b. Other Work Requirements. As soon as possible after the sampled PMs have been selected the appropriate QAE will make an on-site visit and evaluate the quality of work and work completion report work requirements as either satisfactory (S) or unsatisfactory (U) on an EVALUATION WORK SHEET. A brief description of any noted defects will be provided and rework information, if appropriate, will be recorded. In some instances where the work is hard to inspect after the fact, or the system being PM'd is critical, inspections should be made while the PM work is in progress. In most all instances when the quality of work is considered unsatisfactory, the timeliness and completion report work requirements will also be considered unsatisfactory.

c. Unscheduled Inspections. Unscheduled inspections may be conducted on any PM inspection, but should be limited to those of particular importance, such as semi-annual or annual PMs on large or critical systems, PMs in buildings where HVAC problems have been noted previously, etc. Unscheduled inspections should be documented on a separate EVALUATION WORK SHEET from that used for planned sampling.

d. Rework. Rework will normally be allowed when practical, and must be completed by the Contractor within 24 hours of notification. Therefore, each inspection marked for rework must be reinspected by the QAE to see if the work was satisfactorily completed, and appropriate notations completed on the EVALUATION WORK SHEET.

9. Analysis of Results. At the end of the month the QAE will summarize the results of the month's inspections and calculate ODRs and recommended payment deductions for each work requirement.

a. Payment deductions will be calculated on a MONTHLY PAYMENT DEDUCTION FORM. A **SEPARATE** form will be filled out for **EACH** different type of PM performed during the month, since there are separate prices for each service in the Schedule of Deductions. For example, if the Contractor performed monthly, quarterly, and semiannual air handler PM services during the month, three MONTHLY PAYMENT DEDUCTION FORMs will be filled out. An example MONTHLY PAYMENT DEDUCTION FORM for quarterly PM of air handlers is attached.

b. ODRs will be calculated for each work requirement for the overall performance of PM inspection and service by combining the inspection results from all PM MONTHLY PAYMENT DEDUCTION FORMs and using the following formula:

$$ODR = \frac{\text{Total Number of Defects Observed in Sample}}{\text{Number of PMs Sampled}}$$

(1) If the ODR for a work requirement is less than the MADR, the Contractor’s overall performance of that requirement is satisfactory for the month. If the ODR is less than ½ of the MADR, the QAE should recommend to the FSCM to notify the Contractor that performance is excellent and to keep up the good work. Consider whether or not minimum surveillance should be used for the coming evaluation period.

(2) If the ODR for a work requirement is greater than the MADR, the Contractor's overall performance of that requirement is unsatisfactory, and the QAE should recommend to the FSCM that a CDR be issued to the Contractor or that stronger action be taken. Increased surveillance should be used for the coming evaluation period (see paragraph 5 above).

EVALUATION WORK SHEET
PREVENTIVE MAINTENANCE
QA PLAN #4

CONTRACT NUMBER_____

BUILDING NUMBER/SYSTEM	WORK REQUIREMENTS			REWORK ORDERED DATE/TIME	REWORK COMPLETED DATE/TIME	REMARKS
	TIMELY COMPLETION	QUALITY WORK	WEEKLY PM COMPLETION REPORT			

_____
CONTRACTOR'S SIGNATURE/DATE

_____
QAE'S SIGNATURE/DATE

SAMPLE

MONTHLY PAYMENT DEDUCTION FORM
PREVENTIVE MAINTENANCE

CONTRACT NUMBER_____ TYPE PM Air Handlers, Quarterly

	SUMMARY FOR THE PERIOD 1 JAN 90 - 31 JAN 90	TIMELY COMPLETION	QUALITY OF WORK	PROPER PM CHECKLIST
A.	Relative Value of Services (from PRS)	15%	75%	10%
B.	Cost per PM Inspection [Schedule of Deductions Item 5.a(3)(c) x A ÷ 100]	$ 7.50	$ 37.50	$ 5.00
C.	Actual Number of PMs	36	36	36
D.	Sample Size (SS)	36	4	4
E.	Number of Observed Sampled Unsat PMs	5	1	1
F.	Observed Defect Rate (ODR) (E ÷ D x 100)	13.9%	25.0%	25.0%
G.	Unscheduled Inspections (# Unsat)	0	1	1
H.	Value of Unsatisfactorily Performed Work [(E + G) x B]	$ 37.50	$ 75.00	$ 10.00
I.	Deduct for Liquidated Damages (H x .1)	$ 3.75	$ 7.50	$ 1.00
J.	Number of PMs Reworked			
	(1) Sampled PMs	N/A	1	1
	(2) Unscheduled Inspections	N/A	0	0
K.	Payment for Rework [J(1) + J(2)] x B	N/A	$ 37.50	$ 5.00
L.	Other Adjustments (" - " indicates a deduction)	$ 0	$ 0	$ 0
M.	Total Payment Deductions (H + I - K + L)	$ 41.25	$ 45.00	$ 6.00

TOTAL PAYMENT DEDUCTIONS = $ 92.25

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AUTHORIZED SIGNATURE/DATE

QUALITY ASSURANCE PLAN #5
INDEFINITE QUANTITY WORK

1. Contract Requirement. Indefinite quantity work

Work Requirements	Standards of Performance
a. Timely Completion	Completed within the time frames specified [paragraphs C.10.b and C.10.c(5)]
b. Quality Work	Work performed in conformance with quality standards, Section C

2. Primary Method of Surveillance. One hundred percent inspection

3. Maximum Allowable Defect Rate (MADR)

a. 5%
b. 5%

4. Quantity of Work. Estimate of 85 delivery orders issued for indefinite quantity work per month.

5. Level of Surveillance. N/A

6. Sample Size. N/A

7. Sampling Procedures. N/A

8. Evaluation Procedures. The appropriate QAE will evaluate the Contractor's performance at least once for each delivery order issued. A number of inspections may be required to adequately evaluate some delivery orders, especially those with multiple work items and key work phases. A final inspection will be made as soon as possible after notification by the Contractor that work on a delivery order is complete, and not later than the workday following scheduled work completion. The quality of work will be evaluated at each inspection, and a brief but complete description of any noted defects will be recorded on the attached EVALUATION WORK SHEET. A separate EVALUATION WORK SHEET will be filled out for each delivery order. At the final inspection, final grades will be assigned for both work requirements for the Contractor's overall performance of the work in the delivery order.

a. Rework will normally be required. Record all appropriate rework information on the EVALUATION WORK SHEET.

b. When determining the overall quality of work grade to be assigned for each delivery order, the QAE must carefully consider the total scope of work required and subjectively judge whether it has been substantially completed by the Contractor without an inordinate amount of rework being required. Generally, the QAE should grade a delivery order satisfactory overall if there has been no willful departure from the contract, there is no omission of essential work, and essentially 95% or more of the total work has been completed without rework being required. If overall work quality for a delivery order is considered unsatisfactory, timeliness must also be considered unsatisfactory.

The QAE should discuss questionable grades with the FSCM prior to providing the Contractor with a copy of the EVALUATION WORK SHEET.

9. Analysis of Results. At the end of the month the designated QAE will summarize the number of unsatisfactory overall grades for timeliness and quality of work, and calculate Observed Defect Rates (ODRs) for **EACH** using the following formula.

$$ODR = \frac{\text{Number of overall unsatisfactory grades}}{\text{Total number of delivery orders inspected}} \times 100$$

For example:

Number of overall unsatisfactory quality grades = 2
Number of delivery orders inspected = 85

ODR for quality work = 2 ÷ 85 x 100 = 2.4%

a. If the ODR for a work requirement is equal to or less than its MADR, overall performance of that requirement is satisfactory for the month. If the ODR is less than ½ of the MADR the QAE should recommend to the FSCM to notify the Contractor that performance is excellent and to keep up the good work.

b. If the ODR is greater than the MADR, overall performance is unsatisfactory and the QAE should recommend to the FSCM that a CDR be issued to the Contractor, or that stronger action be taken.

c. Payment deductions, if any, will be subtracted from each indefinite quantity delivery order invoiced by the Contractor.

EVALUATION WORK SHEET
INDEFINITE QUANTITY WORK
QA PLAN #5

CONTRACT NUMBER_____ DELIVERY ORDER NUMBER_____

JOB TITLE_____ LOCATION_____

DATE/TIME	WORK REQUIREMENTS		REWORK ORDERED DATE/TIME	REWORK COMPLETED DATE/TIME	REMARKS
	TIMELY COMPLETION	QUALITY WORK			

OVERALL
GRADE: _____ _____

_____ _____

CONTRACTOR'S SIGNATURE/DATE QAE'S SIGNATURE/DATE

IV. CONTRACTOR'S OVERALL PERFORMANCE EVALUATION. NAVFAC MO-327 and the NAVFAC RSED (V3.2) implementation guide provide guidance in determining the Contractor's overall monthly performance for each service; how to use the PRS table and the QAE's inspection results to calculate the total payment due for each service; and how to go about correcting problem areas of performance. This paragraph provides additional information on the completion of the MONTHLY PAYMENT DEDUCTION FORMs included in each sample QA plan, and includes a sample MONTHLY PERFORMANCE EVALUATION REPORT.

A. Monthly Payment Deduction Form. These forms are very useful for summarizing the results of each month's inspections and illustrate how the "CONSEQUENCES OF CONTRACTOR'S FAILURE TO PERFORM REQUIRED SERVICES" and "ESTIMATING THE PRICE OF NONPERFORMED OR UNSATISFACTORY WORK" clauses, the Schedule of Deductions, the PRS table, and the QAE's completed EVALUATION WORK SHEETs are all used in calculating the total payment due for each contract requirement. The format for these forms should be tailored by the user. Other sample formats may be found in NAVFAC MO-327, the NAVFAC RSED implementation guide, and as mentioned previously, computer programs are available which will perform and document basically the same calculations.

B. Analysis of Results. The end result of the monthly inspection process is the overall evaluation of the Contractor's performance for the services inspected. Such an evaluation provides a summary of the Contractor's performance to the Contracting Officer, FSCM, QAEs, Facilities Management Engineering Director, customers, and the Contractor. Overall performance is important in determining whether to increase, decrease, or maintain surveillance at the same level; whether to issue one or more CDRs to the Contractor or take stronger administrative actions; and points out service areas which require greater QAE and Contractor QC emphasis during the coming evaluation period. Therefore, at the end of each month the QAEs should pool their inspection results from the different functional areas and complete and forward for the FSCM's approval a MONTHLY PERFORMANCE EVALUATION REPORT, in a format similar to that shown in Table 1.

C. Contract Discrepancy Report (CDR). When the Contractor's overall performance for any given work requirement is unsatisfactory, the appropriate QAE will recommend to the FSCM that a CDR be issued. Instructions on the use of CDRs, along with a typical format, are included in Chapter 6 of NAVFAC MO-327.

D. Recommended Payment Deductions. The designated QAE(s) for each functional area will recommend to the FSCM those payment deductions that should be made at the end of each month. All work documented as not in compliance with contract requirements (nonperformed or unsatisfactorily performed) is subject to payment deductions plus a 10% or 20% administrative cost (liquidated damages) in accordance with the provisions of the "CONSEQUENCES OF CONTRACTOR'S FAILURE TO PERFORM REQUIRED SERVICES" clause, Section E. Since Government forces are normally not available, the Government will usually require the Contractor to reperform the work, and the 10% factor would be used. If nonperformed or unsatisfactory work is performed by in-house forces or separate contract, the 20% factor would be used.

V. CONTRACTOR SUBMISSIONS. A consolidated summary of Contractor submissions should be prepared from the completed solicitation package. This summary will list required submissions chronologically by due date. QAEs should use this list to ensure that each submittal is turned in on schedule and is acceptable.

TABLE 1

SAMPLE MONTHLY PERFORMANCE EVALUATION REPORT

CONTRACT NUMBER_____ REPORT PERIOD_____

	QUANTITY COMPLETED	MADR	ODR	CDR Y/N	PAYMENT DEDUCTIONS	RATING S/U
QA Plan #1						
EMERGENCY SERVICE CALLS						
Timely Response (35%)		2%				
Timely Completion (10%)		2%				
Quality Work (45%)		2%				
Proper Procedures (10%)		2%				
QA Plan #2						
URGENT SERVICE CALLS						
Timely Response (20%)		3%				
Timely Completion (10%)		3%				
Quality Work (60%)		3%				
Proper Procedures (10%)		3%				
QA Plan #3						
ROUTINE SERVICE CALLS						
Timely Completion (15%)		5%				
Quality Work (75%)		5%				
Proper Procedures (10%)		5%				
QA Plan #4						
PREVENTIVE MAINTENANCE						
Timely Completion (15%)		5%				
Quality Work (75%)		5%				
Proper PM Checklist (10%)		5%				
QA Plan #5						
INDEFINITE QUANTITY						
Timely Completion (20%)		5%				
Quality Work (80%)		5%				

TOTAL PAYMENT DEDUCTIONS = $_____

CONTRACTOR'S OVERALL PERFORMANCE FOR THE MONTH: SAT ☐ UNSAT ☐

FSCM SIGNATURE/DATE_____

END OF QA GUIDE